BY ORDER OF THE COMMANDER
AIR FORCE SPECIAL OPERATIONS COMMAND

AFSOC INSTRUCTION 11-403
1 JANUARY 1998

Flying Operations

C-130 AIRCREW TRAINING

COMPLIANCE WITH THIS INSTRUCTION IS MANDATORY. This instruction and AFI 11-401, *Flight Management*, establish AFSOC standards for qualification, mission qualification, continuation, and upgrade training for aircrew members operating AFSOC C-130 type aircraft. This instruction implements AFPD 11-4, *Aviation Service*. It also applies to Air Education and Training Command, Air National Guard (ANG) when published in the ANGIND2, and to Air Force Reserve Command (AFRC) units when published in the AFRCIND2.

This instruction requires the collection, maintenance, or dissemination of information protected by the Privacy Act of 1974. When personal information is collected, personnel will be provided with a Privacy Act Statement. Authorities for maintenance of this system are 37 U.S.C. 301a, Public Law 92-204, Public Law 93-570, Public Law 93-294, DOD Directive 7750.57, AFI 36-2212, and E.O. 9397. System of Records No. FO60 AF A applies.

SUMMARY OF REVISIONS

This revision incorporates administrative changes; updates when an instructor pilot is required in a pilot seat (para 1.4) updates terms explained (para 1.6); revises waiver authority/procedures; updates time periods to complete training; updates and revises ground training, aircrew refresher, and flying training requirements, notably formation requirements (Chapter 4); revises mission ready training restriction(Table 4.1, note 2); changes currency for aircrew proficiency sortie for crewmembers other than pilots (Table 4.3); changes nav celestial requirements (Table 4.3); revises flying training definitions and requirements (paras 4.14 through 4.17 and Tables 4.4 through 4.9); provides two separate tables to distinguish between core mission and special mission non-currency/unqualification; updates upgrade and specialized training requirements (paras 5.9 through 5.12 and Table 5.1); revises CDTQT requirements (Attach 1); updates loadmaster refresher course requirements (Attach 7)

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Chapter 1 - POLICY **Paragraph**

Forms Prescribed

Chapter 1

POLICY

1.1. General. This instruction provides for training management of Air Force Special Operations Command (AFSOC) and AFSOC-gained C-130 type aircrew members. This instruction also provides training management for Air Education and Training command (AETC) MC-130 aircrew members. It implements AFI 11-401, *Flight Management*, which is affected by the Privacy Act of 1974. Training policy, guidance, and requirements are set forth for each phase of aircrew training. The phases are progressively designed to develop the combat readiness of each aircrew member while maintaining previously acquired proficiency.

1.1.1. Qualification Training (Chapter 2) qualifies aircrew members for basic, non-tactical aircrew duties.

1.1.2. Mission Qualification Training (Chapter 3) qualifies aircrew members in their AFSOC/unit mission.

1.1.3. Continuation Training (Chapter 4) provides the capability for aircrew members to reinforce and build upon previous training and conduct Mission Essential Task List (METL) based, combat-oriented aircrew training designed to enhance and maintain combat readiness.

1.1.4. Upgrade/Specialized Training (Chapter 5) upgrades copilots to aircraft commanders and all aircrew members to instructor and flight examiner qualification. It also qualifies selected aircrew members in specialized mission operations.

1.2. Training Objective. The overall objective of the aircrew training program is to develop and maintain a high state of mission readiness, facilitating immediate and effective employment in exercises, contingencies, limited war, and general war operations.

1.3. Responsibilities:

1.3.1. Headquarters AFSOC and AETC, in coordination with Headquarters United States Special Operations Command (USSOCOM), will establish and supervise an aircrew training program consistent with the policies and requirements of this instruction. Headquarters Air Force Reserve Command (HQ AFRC) and Air National Guard (ANG) will subscribe to this instruction or independently develop training policies or procedures that will be reviewed and approved by AFSOC.

1.3.2. Commanders at each level will comply with the policies and intent of this instruction, ensure that safety is not compromised, and monitor aircrew training to ensure these programs are both aggressively and realistically designed and executed.

1.3.3. Supervisors will identify areas where additional training is needed and direct unit training accordingly. They will initiate action to obtain necessary training support from the appropriate office or headquarters as soon as the need for assistance becomes apparent. Supervisors will ensure mission objectives are prebriefed, debriefed, and evaluated to ensure successful mission accomplishment. They will also initiate waiver requests of training requirements through appropriate channels when facilities and support are not available (see paragraph 1.7).

1.4. Aircrew Training Policy:

1.4.1. AFCAT 36-2223, *USAF Formal Schools*, lists the courses available for student attendance and where courses are conducted. Formal schools are the primary methods of training. The secondary method of training is in-unit, using applicable formal school courseware. USAF policy is that formal schools will be used when available unless attendance would be impractical.

*1.4.2. The number of training tasks in the appropriate training guide is a recommended minimum which normally allows the student to achieve proficiency. It is neither intended to restrict the number of times the task must be accomplished nor restrict proficiency advancement.

1.4.3. When training is not listed for a crew position, the aircrew member is considered qualified in that position for that maneuver.

1.4.4. Except where specifically covered by this instruction, the instructor pilot (IP) will be in a pilot's seat for:

*1.4.4.1. Maneuvers during which an individual occupies a pilot seat, is not fully qualified in the specific type aircraft (MDS) and mission being flown. EXCEPTIONS:

*1.4.4.1.1. AC-130H/U IPs may stand and instruct pilots receiving dry and live fire training.

*1.4.4.1.2. IP candidates, under the supervision of a qualified IP (not in a pilot's seat), may occupy a pilot seat with an unqualified pilot except during takeoff, landing, and simulated engine-out training.

*1.4.4.1.3. Two MC-130E student pilots may simultaneously occupy the pilot's seats during terrain following (TF) low level and airdrop qualification training while under the supervision of an IP (standing). Both students must be specifically certified IAW the 19 SOS MC130EP syllabus of instruction and be documented at a minimum 2B level in the particular maneuver. A mission qualified pilot or co-pilot may simultaneously occupy a pilot seat with a student pilot (or co-pilot)/(certified IAW this paragraph) during TF low-level and airdrop training while under the supervision of an IP (standing). An IP will occupy a pilot seat during all MC-130E NVG low level qualification training.

*1.4.4.1.4. During initial and requalification IP evaluations, IP candidates may occupy a pilot's seat when under the supervision of a flight examiner, not in a pilot's seat. Under these conditions, IP candidates may exercise all of the privileges of a fully qualified IP. *AETC Only:* The pilot occupying the other pilot seat during such circumstances must be qualified as an aircraft commander or higher in the maneuver.

1.4.4.2. Ground idle touch and go landings.

1.4.4.3. Flight idle touch and go landings when the aircraft commander is not touch and go certified in accordance with (IAW) this instruction.

1.4.4.4. Other times required by applicable operational instructions or at the discretion of the instructor pilot.

1.5. Active Duty Service Commitments. Training conducted IAW this instruction which is intended to result in an initial qualification, requalification, or upgrade in crew qualification will result in an active duty service commitment IAW AFI 36-2107, *Active Duty Service Commitments (ADSC) and Specified Period of Time Contracts (SPTC)*. Unit training officers will coordinate procedures with the servicing Military Personnel Flight (MPF) to ensure that individual counseling and personnel system update of commitment occur.

1.6. Terms Explained:

1.6.1. **Air Reserve Component (ARC).** All units, organizations, and members of the Air National Guard of the United States and the Air Force Reserve.

1.6.2**. Airborne Electronic Communications System (ECS) Operator (EC-l30).** An electronic equipment operator whose inflight duties involve the operation of analytic, search, communications, audio, video, and transmitter equipment unique to the unit's mission.

1.6.3. **Basic Qualification Aircrew Member.** An aircrew member who has satisfactorily completed qualification training in the basic aircrew position and maintains aircraft currency IAW this instruction.

1.6.4. **Conversion Training.** Training accomplished when changing between same design aircraft and the amount of training needed for qualification does not warrant attendance at a formal qualification course.

*1.6.5. **Core Mission Events.** A crewmember must be qualified in all core mission events to be considered Mission Ready (MR) or Mission Capable (MC). To determine how non-currency in any core mission event affects overall mission currency, refer to the aircraft's mission currency table (tables 4.4 to 4.8.). Loss of qualification in any core mission event results in loss of overall mission qualification. A core mission event will be considered an instructor certified event when it is not required to be evaluated on the Initial Mission Evaluation. Squadrons will maintain at least 100 percent of their required manning as MR. AFSOC unit CC/DO will determine the status/qualification of crewmembers in excess of 100 percent manning requirement. AETC unit CC/DO will determine any additional requirements for AETC aircrews.

*1.6.6. **Direct Support Operator (DSO).** An AFSOC aircrew position manned by Air Intelligence Agency (AIA) personnel to provide threat warning and enhance aircrew situational awareness.

1.6.7. **Dual Qualified.** A crewmember who is qualified in more than one crew position in the same MDS.

1.6.8. **Event.** A training item to be accomplished. Multiple events may be completed and logged during a sortie unless specifically excluded elsewhere in this instruction.

1.6.9. **Formal School Courseware.** Training materials and programs developed for training aircrew members at formal schools. It includes all student study guides, workbooks, computer-based training lessons, slide tape lessons, instructor guides, and applicable AETC Forms 14, Training Progress Record, AFSOC Forms 672, Training Progress Record, and AFSOC Forms 673, Individual Mission Grade Record, related to the specific course.

*1.6.10. **Formation Operations**. Accomplish IAW applicable volume(s) of AFSOCI 11-202, TO 1-1C-1-20, and TO 1-1C-1-29. AFSOC guidance will never be less restrictive than the formation definitions found in AFI 11-206, attachment 1 section C, “Formation Flight”, “Nonstandard Formation”, and “Standard Formation”. Formation operations places all aircraft in a critical phase of flight which requires constant vigilance, strict discipline, and polished crew coordination for mission accomplishment. Training will ensure aircrew can think and plan for multiple aircraft instead of single ship operations.

1.6.11. **Forward Area Refueling/Rearming Point (FARRP).** Hot Refueling and rearming that is normally conducted at night in an austere environment with aircraft engines running.

*1.6.12. **Helicopter Air Refueling (AR).** For the purpose of this instruction, airborne fuel offload (simulated or actual) by MC-130P or MC-130E tanker aircraft to a helicopter.

1.6.13. **High Speed Low Level Aerial Delivery System (HSLLADS).** Aerial delivery of loads at airspeeds from 150-250 knots using specialized MC-130E/H equipment and procedures.

1.6.14. **Hot Refueling.** Aircraft hot refueling is fuel transfer from any fuel source with one or more aircraft engines operating. Hot refueling includes fuel transfer from internal aircraft fuel tanks, auxiliary tanks, or internally loaded fuel bladders. Hot refueling is normally conducted at night in an austere environment in support of a forward area refueling and rearming point (FARRP).

1.6.15. **Inflight Refueling (IFR).** For the purpose of this instruction, airborne fuel onload (simulated or actual) by AC/EC/MC-130 receiver aircraft.

1.6.16. **Infrared Detecting Set (IDS).** A passive navigation/sensor system which detects radiant infrared energy.

1.6.17. **Instructor Certified Events.** Training given to an aircrew member that requires an instructor to certify the student's attainment of the required proficiency and knowledge levels as specified in courseware and, if appropriate, AFSOC Forms 672. Instructor certified events are documented in AF Form 1381, USAF Certification of Aircrew Training.

*1.6.18. **Mission Capable Aircrew Member.** An aircrew member who has satisfactorily completed mission qualification and is maintaining 50 percent of the applicable mission qualification currency requirements of this instruction. Mission capable crewmembers may perform primary crew duties on any unilateral training mission. For other missions, the unit commander must determine the readiness of each mission capable crewmember to perform primary crew duties.

1.6.19. **Mission Control Chief (MCC on EC-130).** An electronic warfare officer whose inflight duties involve the direction and coordination of the mission crew.

1.6.20. **Mission Design and Series (MDS) for Aircraft.** The first letter identifies the mission of the aircraft (i.e. A, E, H, M). The second letter and subsequent numbers identify the design of the aircraft (i.e. C-130, C-141, F-15). The last letter identifies the series of aircraft (i.e., E, H, N, P, U).

1.6.21. **Mission Essential Task List (METL).** Combat-oriented training requirements. All AFSOC aircrew training requirements should be in support of unit METLs.

1.6.22. **Mission Events.** The squadron Doctrinal (DOC) Statement defines required crew capabilities. These capabilities/tactics/events can be categorized as either Core or Special Mission.

*1.6.23. **Mission Oriented Simulator Training.** Training conducted in a WST or MRD that incorporates a full mission profile. The focus of this training should be crew coordination and problem solving.

1.6.24. **Mission Ready Aircrew Member.** An aircrew member who has satisfactorily completed mission qualification and is maintaining all of the applicable mission qualification currency requirements of this instruction. AETC aircrews who maintain MR flying currency requirements are not MR under AFSOC requirements unless all required ground training requirements are accomplished (i.e., CDTQT, Ground Chemical Defense Ensemble, etc.).

1.6.25. **Multiple Qualification.** A crew member who is qualified in more than one MDS.

1.6.26. **Primary Mission Aircraft Inventory (PMAI).** Aircraft assigned to a unit for performance of its wartime mission. PMAI forms the basis for the allocation of operating resources to include manpower, support equipment, and funding of flying hours. *Exception:* AETC units are allocated operating resources based on programmed flying training (PFT) requirements.

*1.6.27. **Primary Training Aircraft Inventory (PTAI).** Aircraft required primarily for technical and specialized training for crew personnel or leading to aircrew qualification.

1.6.28. **Projectile Impact Point Prediction (PIPP).** An AC-130U radar mode that estimates the impact position of 40mm and 105mm projectiles.

1.6.29. **Self-Contained Approach (SCA).** An approach conducted using self-contained navigation systems on the aircraft.

1.6.30. **Sensor Operator (SO) (AC-130).** An aircrew member trained in the operation of low light level television (LLLTV), all light level television (ALLTV), or infrared (IR) sensor and other related equipment.

1.6.31. **Special Mission Evaluation.** Training given in a specific mission area/task that requires a flight evaluation.

1.6.32. **Special Mission Events.** Some MR/MC crewmembers will carry additional qualifications in special mission events. Unit CC/DO will determine which crewmembers will be qualified in special mission events. Unit CC/DO will determine if special mission events have affected C-rating and report variations through Status Of Resources in Training (SORTS). Special mission requirements are also shown in table 4.6. AETC OG/CCs will maintain sufficient qualified aircrew members in all special mission events that are included in the formal school syllabus of instruction including Hot Refueling for MC-130H aircrews. Each HQ 19 AF flight examiner will maintain qualification in all special mission events that are instructed in the formal school syllabus of instruction within their respective MDS.

1.6.33. **Terrain Following (TF).** Any combination of X-band or KU-band radar operation to accomplish terrain following low level flight as described in AFSOCI 11-202, Volume 11, *MC-130E Combat Talon I Specific Employment*, and AFSOCI 11-202, Volume 12, *MC-130H Talon II Specific Employment*.

1.6.34. **Total Flying Time.** Total time for all aircraft flown in military service to include student time. Time accumulated must be in the aircrew member's current rating (i.e., pilot, navigator, etc.).

1.6.35. **Training Status.** A deficient status in which a crewmember must fly under the supervision of an instructor when occupying a primary crew position. Once deficient items are corrected, the crewmember is removed from training status.

1.6.36. **Volume.** For the purposes of this instruction, volume refers to the number of events an aircrew member must accomplish in a given period of time(i.e., quarterly or semiannually).

1.7. Waivers: Process waivers IAW table 1.1.

***Table 1.1. Processing of Waiver Requests.**

Waiver requested by:	Waiver Authority	Forward request through:	Reply sent to:	Info copy sent to:
Active Duty unit	HQ AFSOC/DOT	Group/DOT to HQ AFSOC/DOT	Group/DOT	Requesting unit
AETC Formal School or AETC Unit	HQ AETC/DOF	Group/DOT to HQ 19 AF/DOS to HQ AETC/DOF	Group/DOT	AETC Formal School HQ AFSOC/DOT HQ 19 AF/DOS
AFSOC Formal School	HQ AFSOC/DOT	Group/DOT to HQ AFSOC/DOT	Group/DOT	Formal School
AFRC unit	*HQ AFRC/DOT	Group/OGV to 10 AF/DOT to HQ AFRC/DOT	Group/OGV	10 AF/DOT, HQ AFSOC/DOT, Requesting Unit
ANG Unit	NGB/XOOM	Group/DOT	Group/DOT	HQ AFSOC/DOT, Requesting Unit

*HQ AFRC/DO is waiver authority for secondary method of training, grade requirements, and upgrade timing for their respective units.

1.7.1. Provide the following information in a waiver request:

1.7.1.1. Identify waiver type (include paragraph requiring waiver action).

1.7.1.2. Full name and grade of individual requiring waiver.

1.7.1.3. Unit of assignment (if attached, provide flying unit attached to also).

1.7.1.4. Current crew qualification, including special mission qualifications (if applicable).

1.7.1.5. Total flying time/PMAI time including instructor/evaluator time (if applicable).

1.7.1.6. Crew qualification to which aircrew member is qualifying or upgrading (if applicable).

1.7.1.7. Scheduled training start date (if applicable).

1.7.1.8. Expected qualification or upgrade completion date (if applicable).

1.7.1.9. Date event last accomplished (if applicable).

1.7.1.10. Explanation of reason for waiver.

1.7.1.11. Requesting unit point of contact (include name, rank, office symbol, e-mail address, and telephone number).

*1.7.1.12. Mailing address to which the courseware should be sent.

*1.7.2. For approved in-unit (secondary method) training, the waiver authority (per Table 1.1) will include the appropriate formal school (58 SOW, 19 SOS, 314 AW) as an addressee on all correspondence and will request that the formal school forward applicable courseware to the aircrew member's unit of assignment. The 314 OG and 58 OG will forward approved

formal courseware to the appropriate unit without further AETC coordination. Maintain the waivers in the individual's AFSOC Form 670 or the 19 AF Form 15, Aircrew Training Record.

1.7.3. Units conducting training by the secondary method where a waiver is not required (instructor requalification for example) will send a request for the applicable courseware through channels to HQ AFSOC/DOT, with an information copy to the appropriate formal school. ARC units will inform ANGRC/DOT or HQ AFRC/DOT as appropriate. Include unit point of contact (name, rank, office symbol, and telephone number) and the name and rank of the individual who will receive the training.

1.7.4. Use formal courseware received for training the individual referenced in the waiver. When the courseware is adapted for local use, modify it only if the training is incompatible with local training conditions; i.e., no simulators.

1.7.5. Items listed below may be waived at the level indicated:

*1.7.5.1. The wing/group commander may waive 10 percent of the total and PMAI hours required for upgrade in all crew positions. A copy of the waiver must be filed in the individual's training record. Students will bring a waiver letter to the formal school for insertion into their training record.

1.7.5.2. Wing/group commanders may extend individual eligibility periods up to 2 months for table 4.1 requirements for reasons of crewmember non-availability. Notify HQ AFSOC/DOTHQ 19 AF/DOS, ANGRC/DOT, and HQ AFRC/DOT by message when waivers or extensions are issued.

1.7.5.3. Wing/group commanders may waive flying currency items in tables 4.3 through 4.9 on an individual basis only. Wings/groups must keep an accurate record of waivers granted. Notify HQ AFSOC/DOT, HQ 19 AF/DOS, ANGRC/DOT, or HQ AFRC/DOT, as appropriate, by hardcopy (message, memo, - not e-mail) when waivers are issued.

1.7.5.4. Waivers that do not fall within the guidelines above must be submitted using the format in paragraph 1.7.2.

1.8. Senior Officer Flying/Supervisory Aircrew:

1.8.1. **Senior Officer Flying**. Senior officers in authorized flying positions (RPI 6 or 8) may be qualified in unit aircraft if they have completed formal UPT/UHT course (orientation courses do not apply). They must complete annual written exams and flight evaluations which will be annotated on AF Form 8, *Certificate of Aircrew Qualification*.

1.8.1.1. General officers in commander billets may fly without an instructor pilot (IP) if mission qualified. All other general officers must fly with an IP. General officers will complete the following semiannual currency requirements in each aircraft in which the general officer is qualified:

	Pilot	Other
Sorties	6	6
Takeoff/Approach/Landing	6 each	N/A

1.8.1.2. Colonels will maintain either basic qualification, mission capable, or mission ready status and complete the appropriate ground and flying requirements outlined in chapters 2, 3, and 4. Operations Group commanders must be mission capable flight examiners.

1.8.1.3. Lieutenant colonel and below will maintain either basic qualification, mission capable, or mission ready status, and complete the appropriate ground and flying requirements outlined in chapters 2, 3, and 4. Flying squadron commanders and operations officers will maintain mission ready status. *Exception:* AETC flying squadron commanders and operations officers will complete at least mission capable flying currency requirements.

*1.8.2. **Supervisory Flying**. Senior officers in authorized supervisory flying positions (RPI 6 or 8) who are qualified and maintain currency in one type aircraft, but have other types assigned to their units, may fly in primary crew positions in unit aircraft in which they are not qualified in observer status only, and only after completion of the Senior Officer Orientation Course for the applicable aircraft (note: only one Senior Officer Orientation Course is required for transitioning between AC-

130H, C-130E, and MC-130E/P aircraft). They must have current flight physicals, physiological training, and egress training prior to their first flight. They will log "O" (0-6 and above) or "X" (0-5 and below) time (not creditable for pay) and will not occupy a pilot's seat with passengers on board. Senior officer pilots logging "O" time will always fly with an instructor pilot when occupying a pilot seat.

1.8.3. **Senior Officer Multiple Aircraft Qualification**. Senior officers in supervisory flying positions (RPI 6 or 8) maintaining multiple aircraft qualification must have completed a formal UHT/UPT course. Basic qualification requires annual qualification examinations for each aircraft. Only one annual basic qualification flight evaluation is required between AC-130H, C-130E, and MC-130E/P aircraft, maintain Flight Evaluation Folder (FEF) and semiannual currency requirements at primary unit. Annual basic qualification flight evaluations are required in AC-130U and/or MC-130H aircraft. Mission qualification requires mission qualification examinations in each MDS and mission flight evaluations in each MDS.

1.9. Intracommand and Intercommand Transfer of Aircrews. Validated training completed prior to transfer is honored by the gaining organization and is used to determine the appropriate training phase where the newly assigned aircrew member is placed. Aircrew members qualified in the same MDS of one unit are considered qualified in that equipment throughout the force when used for the same mission.

1.10. Unit/Theater Indoctrination Training. Prior to performing unsupervised aircrew duties, crewmembers will complete a unit/theater indoctrination program. This training is a requirement for all newly assigned and TDY aircrew members. Each unit will publish a directive outlining specific ground and flight requirements. Design this training to prepare aircrew members for theater operations. This training will: familiarize them with the local flying area and facilities/support agencies available, introduce any theater/mission unique procedures, and review all theater unique instrument requirements. The instrument training portion will include theater unique instrument requirements and procedures, the use of MAJCOM approved non-DOD instrument approach procedures, required instrumentation for specific approaches, and theater weather conditions. Document unit/theater indoctrination training in AFORMS for assigned and attached personnel.

1.11. Initial Cadre for Change of Aircraft, Equipment, or Capability. When possible, qualified personnel in other units operating like equipment will provide the initial cadre. In some instances, it will be necessary for units converting from one design aircraft to another to form an initial cadre of aircrew personnel for whom certain training qualification requirements may be waived. Authorization to form initial cadre crews will be contained in the conversion program action directive. Unless otherwise stated in the program action directive, the following conditions will apply to management of initial cadre aircrew qualification:

1.11.1. A nucleus of instructor and flight examiner personnel (initial cadre) will be formed to begin aircrew conversion. Converting units send proposed initial cadre list by name, rank, current crew position and aircraft, total flying time, and requested crew qualification level through channels to HQ AFSOC/DO, HQ AFRC/DO or HQ AETC/DO (through HQ 19 AF/DO and HQ AETC/DOFS) as appropriate for approval.

1.11.2. Initial cadre won't be designated in a crew position higher than currently held; for example, AC-130H aircraft commander to AC-130U flight examiner. Enter appropriate comments in the remarks section of AF Form 8 explaining the individual's status as initial cadre instructor or flight examiner.

1.11.3. Following final approval, publish a squadron letter to identify initial cadre instructors and flight examiners by aircraft and crew qualification and file in each cadre individual's FEF.

1.12. Training Records. Use AFSOC Form 670 or 19 AF Form 15 to document the qualification, requalification, specialized training, or upgrade of an aircrew member. This record and attached forms will provide a chronological record of qualification or upgrade training administered by a formal flight training school or a unit of assignment and serves as a mini-syllabus. It documents all applicable ground training, special function training, part task training, cockpit procedures training, simulator training, and flying training accomplished by an aircrew member. Instructions for completing and managing training records are contained in chapter 6. 58 SOWI 36-2201, *Formal Aircrew Training Management*, contains additional instructions for AETC units.

*1.12.1. **Formal Training Schools.** The 314 OG and 58 OG are OPRs for applicable training forms pertaining to their respective AFCAT 36-2223 formal courses. The 19 SOS is OPR for AFSOC Form 672 pertaining to their respective AFCAT 36-2223 formal courses. The 193 SOG/193 SOS is OPR for AFSOC Form 672 pertaining to EC-130 qualifications. These forms will contain the appropriate tasks and subtasks, minimum events, training profile, and minimum proficiency level

prescribed by the applicable courseware. Forward AFSOC Form 672 updates to HQ AFSOC/DOT for coordination and approval prior to implementation. Use the example letter at Attachment 8 to nominate an individual for formal training.

1.12.2. **In-Unit Qualification/Upgrade Training.** Training personnel in the unit of assignment will prepare an AFSOC Form 670 or 19 AF Form 15 folder prior to beginning unit level training. If using the secondary method of qualification or upgrade, request and use the applicable formal school courseware.

1.13. Unit Aircrew Capability. Squadrons will maintain mission ready status on all primary aircrew members up to unit authorizations. Commanders will ensure aircrews are trained to meet capabilities specified in unit DOC statements. ARC units will reference their respective operational tasking to determine special mission crew qualifications if not specified by this instruction. Supervisory aircrew and staff members assigned above squadron level which are in excess of the units mission requirements will maintain mission ready, mission capable, or basic qualification status, as required. For AETC units, aircrews will complete mission capable flying training currency requirements as a minimum (except OGV aircrew, which will complete mission ready requirements). AETC flying squadron commanders may impose additional currency requirements.

1.14. Changes. Recommendations for improvement to this instruction are encouraged. Send to HQ AFSOC/DOT, through command channels, on AF Form 847, Recommendation for Change of Publication. AETC units will submit changes on AF Form 847 to HQ AFSOC/DOT through HQ 19 AF/DOS and HQ AETC/DOFS.

***1.15. Publication Administration.** As a minimum, all instructors and flight examiners will maintain this instruction. AFSOC PDOs will consolidate requirements and distribute to units within their areas of responsibility. HQ AFSOC/SC will set up an account and provide an electronic copy to 58 OG/CCI; 58 OG/CCI will consolidate requirements and make copies available to the units. If required by mission or location, write unit supplements. Send four copies to HQ AFSOC/DOT, 100 Bartley Street, Suite 160W, Hurlburt Field, FL 32544-5273. Additionally, AETC units writing supplements will forward an electronic copy and all changes to HQ 19 AF/DOS and HQ AETC/DOFS. This publication will be printed in Times New Roman font using 10 pitch type.

Chapter 2

QUALIFICATION TRAINING (PHASE I)

Section A - Scope

2.1. Overview. This chapter outlines the minimum requirements for qualification training, requalification training for unqualified periods of greater than two years, or conversion training of pilots, navigators, flight engineers, and loadmasters. Required qualification training for other aircrew members is in chapter 3. Commanders will ensure aircrew members completing qualification, requalification or conversion training meet the requirements of this chapter.

2.2. General Requirements. The primary method of qualification is to complete the appropriate formal training course listed in AFCAT 36-2223. Completing the appropriate formal course satisfies the training requirements of this chapter. When attendance is not practical or quotas are not available, units may request waivers to conduct in-unit (secondary method) qualification training using formal school courseware. Prior to certification or performing unsupervised primary aircrew duties, newly assigned personnel must complete a unit/theater indoctrination program per chapter 1 of this instruction.

***2.3. Time Period for Secondary Method Qualification.** Active duty aircrew members (primary or supervisory) must complete in-unit (secondary method) qualification or requalification training within 4 months (normally 12 months for ANG and AFRC) from the date of their first ground training session or first flight (whichever occurs first). Active duty individuals will start training within 6 weeks after reporting for duty, ARC individuals will normally begin training within 60 days or second UTA after reporting for duty. The provisions of AFI 11-401 apply to aircrew members who fail to qualify under the requirements of this chapter. Individuals unable to complete mission qualification within these limits may continue training; however, their units will notify HQ AFSOC/DOT, (AFRC units through channels to HQ AFRC/DOT and ANG through channels to ANGRC/DOT, with information copy to HQ AFSOC/DOT) with a description of the difficulty and expected qualification date. AETC units will forward this information to HQ AETC/DOFS with information copies to HQ 19 AF/DOS and HQ AFSOC/DOT.

Section B - Prerequisites

***2.4. Training Prerequisites.** Before entering qualification/requalification training, each aircrew member must comply with the appropriate formal course initial qualification training prerequisites prescribed in AFCAT 36-2223. Request prerequisite waivers IAW AFSOCI 11-401. IAW AFCAT 36-2223, HQ AETC/DOF is the course prerequisite waiver approval authority for students attending MC-130H and MC-130P formal school courses.

2.4.1. The following chart is based on total flying hours and C-130 hours. It shows the minimum requirements to be trained and evaluated as an aircraft commander (FP). If the requirements below are not met, train and evaluate the individual as a copilot (FC).

Total Flying Time (Hours)	C-130 Hours*
1,900 or more	200
1,600 - 1,899	300
1,300 - 1,599	400
1,000 - 1,299	800

* For the purpose of this instruction, any type C-130 aircraft.

2.4.2. Aircrew members requalifying in the aircraft will comply with the appropriate AFCAT 36-2223 requalification course prerequisites and incur an active duty service commitment for requalification IAW AFI 36-2107. If there is not a separate requalification course, these aircrew members will comply with the initial course prerequisites.

Section C - Ground Training Requirements

2.5. Ground Training Requirements. Satisfactory completion of the appropriate AFCAT 36-2223 formal training course satisfies the requirements of this paragraph. Approved in-unit qualification training must be accomplished IAW applicable formal school courseware and will include the following ground training:

2.5.1. **Academic Training.** As delineated in applicable courseware.

*2.5.2. **Written Examination.** A written examination must be completed before the end of qualification flying training. Prepare the written examination locally and take questions from the appropriate series aircraft manuals or technical orders (Formal school or Group stan/eval qualification open and closed book examinations meet this requirement). When completed by the student, the exam will be graded and corrected to 100 percent. Minimum passing score is 85%. All pilots must also satisfactorily complete the annual instrument refresher course and exam. The formal schools will not forward their examinations as part of the courseware for in-unit qualifications.

2.5.3. **Flight Deck and Cargo Compartment Familiarization.** Aircrew members must be given flight deck and cargo compartment familiarization. Place emphasis on the location and function of all switches and controls required for all emergency procedures.

2.5.4. **Ground Egress Training.** Aircrews will complete initial ground egress training during initial qualification training. All crewmembers will receive training prior to their first flight. Both academics and hands on training are required to complete ground egress training. Academic training will cover the opening of all doors (including ramp and door), emergency escape hatches, and exit instructions. Actual hands-on training will be accomplished in the aircraft and will include opening the crew entrance door, a paratroop door, an emergency escape hatch, a pilot's swing window, and the ramp and door. A qualified instructor loadmaster or flight engineer is required to be present during opening of the ramp and door.

Section D - Flying Training Requirements

2.6. Flying Training Requirements. Satisfactory completion of the appropriate AFCAT 36-2223 formal training course satisfies the requirements of this paragraph. Approved in-unit qualification training must be accomplished IAW applicable formal school courseware and the guidance below:

*2.6.1. Flying training lessons should be completed sequentially. If mission scheduling or student progress dictates otherwise, the training sequence may be changed by the unit commander. Exception: 19 AF/DO is syllabus waiver authority for formal training at the 58 SOW.

2.6.2. There should be minimum time lapse between training missions. Every effort should be made to complete qualification training requirements within the prescribed time period.

2.6.3. Crewmember requirements may be completed on training or operational missions under the supervision of an instructor in the same aircrew position. Comply with restrictions in AFSOCI 11-202.

2.6.4. Conduct flight evaluation IAW AFSOCI 11-408, *Aircrew Standardization/Evaluation Grading Criteria*.

*2.6.5. AFSOC and AETC policy for C-130 pilot training requires that, prior to the qualification evaluation, copilots will see a demonstration of a simulated 3-engine takeoff (except AC-130) and a demonstration of a simulated 2-engine approach and landing. Pilots will train to a 3C level in simulated 3-engine takeoffs (except AC-130) and simulated 2-engine approaches and landings. IPs will train to a 3C level in simulated 3-engine takeoffs (AC/EC-130 perform in C-130) and simulated 2-engine approaches and landings.

Section E - Aircraft Conversion Training

***2.7. Phase One Conversion Training Requirements.** Use conversion training when changing between same design aircraft and the amount of training needed for qualification does not warrant attendance at a formal qualification course. Additionally, accomplish conversion training when an aircraft is modified and any required training for that modification can easily be accomplished in-unit. Normally, conversion training is accomplished as a result of qualification training at the formal school. In-unit conversion training can be used as a method to quickly qualify an aircrew member in order to use them as a basic crewmember while awaiting formal mission qualification training. Conversion training requires the

completion of the appropriate AFSOC Form 672 or 19 AF Form 14, Training Progress Record, and satisfactory completion of the applicable MDS written qualification examination. Newly assigned aircrew members must also complete unit/theater indoctrination requirements IAW chapter 1. After conversion, aircrew members may maintain previous Phase I qualifications in the C-130 at the discretion of the gaining unit commander. Aircrew members entered into conversion training will complete training within 2 months (4 months for ARC) after the first flight of the training program.

*2.7.1. **Pilot Conversion Training.** In-unit conversion training is authorized when changing from C-130E/H and EC-130E/H to any other AFSOC mission C-130 aircraft (except MC-130H). The following events will be taught prior to pilot's EOC examination: copilots will see demonstration of simulated 3-engine takeoff (except AC-130), and 2-engine approach and landing; pilots will train to a 3C level in simulated 3-engine takeoff (except AC-130) and 2-engine approach and landings; IPs will train to a 3C level in simulated 3-engine takeoffs (AC/EC-130 pilots perform in C-130) and 2-engine approach and landings.

2.7.2. **Navigator Conversion Training.** In-unit conversion training is authorized when changing from C-130E/H and EC-130E/H to MC-130P aircraft (non-SOFI only).

2.7.3. **Flight Engineer Conversion Training.** In-unit conversion training is authorized from C-130E/H and EC-130E/H to any other AFSOC mission C-130 aircraft (except AC-130U or MC-130H).

2.7.4. **Loadmaster Conversion Training.** In-unit conversion training is authorized from C-130E/H and EC-130E/H to any other AFSOC mission C-130 aircraft.

Chapter 3

MISSION QUALIFICATION TRAINING (PHASE II)

Section A - Scope

***3.1. Overview.** This chapter establishes the minimum training requirements for completing mission qualification and requalification. Conduct mission requalification IAW Table 4.11 and this chapter.

3.2. General Requirements. The primary method of mission qualification is to complete the appropriate formal training course listed in AFCAT 36-2223. Completing the appropriate formal course satisfies the training requirements of this chapter. When attendance is not practical or quotas are not available, units may request waivers to conduct in-unit (secondary method) mission qualification training using formal school courseware. Prior to certification or performing unsupervised primary aircrew duties, newly assigned personnel must complete a unit/theater indoctrination program per chapter 1 of this instruction.

***3.3. Time Period for Secondary Method Mission Qualification.** Active duty aircrew members (primary or supervisory) must complete in-unit (secondary method) qualification or requalification training within 4 months (normally 8 months for ANG and 12 months for AFRC) from the date of their first ground training session or first flight (whichever occurs first). Active duty individuals will start training within 6 weeks after reporting for duty, ARC individuals will normally begin training within 60 days or second UTA after reporting for duty. The provisions of AFI 11-401 and AFI 36-2214 apply to aircrew members who fail to qualify under the requirements of this chapter. Individuals unable to complete mission qualification within these limits may continue training; however, their units will notify HQ AFSOC/DOT, (AFRC units through channels to HQ AFRC/DOT and ANG through channels to ANGRC/DOT, with information copy to HQ AFSOC/DOT) with a description of the difficulty and expected qualification date. AETC units will forward this information to HQ AETC/DOFS with information copies to HQ AF/DOS and HQ AFSOC/DOT.

Section B - Prerequisites

3.4. Training Prerequisites:

*3.4.1. Aircrew members must meet the prerequisites of the appropriate formal school course described in AFCAT 36-2223. Request prerequisite waivers IAW AFSOCI 11-401. IAW AFCAT 36-2223, HQ AETC/DOF is the approval authority for students attending MC-130H and MC-130P formal school courses.

3.4.2. Aircrew members requalifying in a unit's mission will comply with the appropriate mission requalification course prerequisites and incur an active duty service commitment for mission requalification IAW AFI 36-2107. If there is not a separate mission requalification course, these aircrew members will comply with the initial mission qualification course prerequisites.

3.4.3. The following chart is based on total flying hours and C-130 hours. It shows the minimum requirements to be trained and evaluated as a mission aircraft commander (MP). If the requirements below are not met, train and evaluate the individual as a mission copilot (MC).

Total Flying Time (Hours)	C-130 Hours*
1,900 or more	**200**
1,600 - 1,899	**300**
1,300 - 1,599	**400**
1,000 - 1,299	**800**

* For the purpose of this instruction, any type C-130 aircraft and aircrew with a designated low-level mission, except for AC/EC-130. For AC/EC-130: any type C-130 aircraft.

Section C - Ground Training Requirements

3.5. Ground Training Requirements. Satisfactory completion of the appropriate AFCAT 36-2223 formal training course satisfies the requirements of this paragraph. Approved in-unit qualification training must be accomplished IAW applicable formal school courseware and will include the following ground training:

3.5.1. **Academic Training.** As delineated in applicable courseware.

*3.5.2. **Written Examination.** A written examination must be completed before the end of mission qualification flying training. Formal school End Of Course (EOC) examinations satisfy this requirement (Group stan/eval or equivalent examinations also fulfill this requirement). When completed by the student, the exam will be graded and corrected to 100 percent. The minimum passing score is 85%. The formal schools will not forward their examinations as part of the courseware for in-unit qualifications.

3.5.3. **Flight Deck and Cargo Compartment Familiarization.** Aircrew members must be given flight deck and cargo compartment familiarization. Place emphasis on the location and function of all switches and controls required for all emergency procedures.

*3.5.4. **Ground Egress Training.** Aircrews will complete initial ground egress training during initial qualification training. All crewmembers will receive training prior to their first flight. Both academics and hands on training are required to complete ground egress training. Academic training will cover the opening of all doors (including ramp and door), emergency escape hatches, and exit instructions. Actual hands-on training will be accomplished in the aircraft and will include opening the crew entrance door, a paratroop door, an emergency escape hatch, a pilot's swing window, and the ramp and door. A qualified instructor loadmaster, flight engineer, or certified contractor is required to be present during opening of the ramp and door.

3.5.5. **Intelligence Officers.** Intelligence Officers on flying status will accomplish the same ground training requirements as the DSOs as defined in Table 4.1.

Section D - Flying Training Requirements

***3.6. Flying Training Requirements.** Satisfactory completion of the appropriate AFCAT 36-2223 formal training course satisfies the requirements of this paragraph. Approved in-unit qualification training must be accomplished IAW applicable formal school courseware or HQ AFSOC/DOT approved courseware and the guidance below:

*3.6.1. Flying training lessons should be completed sequentially. If mission scheduling or student progress dictates otherwise, the training sequence may be changed by the unit commander. Exception: 19 AF/DO is the syllabus waiver authority for formal training at the 58 SOW.

3.6.2. There should be minimum time lapse between training missions, and every effort should be made to complete mission qualification training requirements within the prescribed time period.

3.6.3. Crewmember requirements may be completed on training or operational missions under the supervision of an instructor in the same aircrew position. Comply with restrictions in AFSOCI 11-202.

3.6.4. Conduct flight evaluation IAW AFSOCI 11-408.

3.7. Mission Specific Requirements:

*3.7.1. **AC-130 Requirements.** AC-130H/U navigators and fire control officers (FCO) will have 500 hours AC-130H/U time and maintain at least an instructor qualification prior to entering dual navigator/FCO mission qualification training.

3.7.2. **EC-130 Requirements.** Conduct qualification and mission qualification requirements training in-unit with 193 SOG courseware. Aircrew members must comply with the following:

3.7.2.1. All aircrew members will complete qualification training requirements prior to mission qualification certification or flight evaluation.

3.7.2.2. Mission qualification flying training may be accomplished concurrently with qualification training.

3.7.2.3. All aircrew members in mission qualification training will accomplish training items under the supervision of an instructor qualified in the EC-130 aircraft.

3.7.3. **DSO Requirements.** All direct support operators (DSOs), and intel officers on flying status in mission qualification training will accomplish training items under the supervision of a qualified DSO instructor on that specific aircraft.

*3.7.3.1. Intel officers assigned to aircrew UMD positions with an "X" prefix are allowed to fly on all AFSOC aircraft. They will maintain qualification and fly for pay only on the MC-130H. When flying aircraft other than the MC-130H, they will log the “X” crew position and “other” time.

3.7.4. **FARRP.** FARRP training will be conducted IAW AFSOC Form 672 or 19 AF Form 14. All MC-130E/H crew members will accomplish Phase I (academics) training during initial mission qualification. Aircraft commanders, flight engineers, loadmasters, and hose deployment personnel (HDP) will accomplish Phase II, and III training.

*3.7.5. Deleted.

Section E - Aircraft Conversion Training

3.8. Phase Two Conversion Training Requirements. The only crew positions authorized for in-unit conversion training for phase two are: loadmasters, communication systems operators, and aerial gunners. Accomplish in-unit conversion training for aircrew members by completing the AFSOC Form 672 or 19 AF Forms 14 for conversion training and satisfactorily completing the unit written mission qualification examination for the appropriate crew position.

3.8.1. **Loadmaster Conversion Training.** In-unit conversion training is authorized between the AC-130H and AC-130U aircraft or MC-130E and MC-130H aircraft.

*3.8.2. **Communication Systems Operator (CSO) Conversion Training.** In-unit conversion training is authorized between MC-130E/P aircraft.

3.8.3. **Aerial Gunner Conversion Training.** In-unit conversion training is authorized between the AC-130H and AC-130U.

*3.8.4. **DSO Conversion Training.** Once qualified in either an AC-130H or AC-130U, DSO conversion training is authorized between AC-130H/U. Once qualified in an MC-130E, MC-130H, or MC-130P, DSOs may convert between MC-130E/H/P.

Chapter 4

CONTINUATION TRAINING (PHASE III)

Section A - General

4.1. General Requirements:

4.1.1. Requirements in this chapter satisfy the minimum flying and related ground training requirements established by HQ USAF and HQ AFSOC, HQ AETC, and HQ 19 AF to maintain currency. Individual proficiency may require a greater number of events. Commanders will ensure aircrew members receive sufficient continuation training to maintain individual proficiency. All flying training events are derived from AFSOC mission requirements which correspond to AFSOC METLs, unit METLs, and formal school syllabus training requirements. Any flying training that doesn't support AFSOC METLs, unit METLs, or formal school training should be questioned and reviewed by the unit commander.

4.1.2. Training requirements may be completed on any sortie if the accrediting criteria of this instruction are met. Sorties and events that are compatible may be credited on the same flight.

4.1.3. In planning and scheduling training missions, units will develop realistic mission scenarios to maximize training benefits on each mission.

4.1.4. When more than one event is required during a training period, commanders must ensure that flying training events are spread as evenly as possible over the training period.

4.1.5. Accomplish events identified as night requirements during the hours of darkness. Additional night events accomplished that exceed night requirements may be credited as day or total events unless otherwise indicated.

4.1.6. Aircrew members will not log continuation training requirements in events in which they are unqualified.

*4.1.7. Semiannual/Quarterly training events accomplished on a satisfactory qualification, mission qualification, special mission, or requalification evaluation may be credited toward the individual's semiannual/quarterly currency requirements.

*4.1.8. For qualifications requiring instructor certification, the event resulting in certification and each event there after may be credited towards currency requirements.

4.2. Prerequisites. Aircrew members who maintain basic qualification status must have completed qualification training (Phase I). Aircrew members who maintain mission ready or mission capable status must have completed mission qualification training (Phase II).

4.3. Training Requirements:

4.3.1. **Ground Training.** All aircrew members will comply with the applicable requirements of table 4.1.

4.3.2. **Prorating Training Requirements.** Prorate aircrew member flying training requirements for individuals following completion of basic qualification, mission qualification, requalification, and upgrades to a new special mission qualification, or are not available for flying duties due to PCS, non-flying TDY, DNIF, emergency leave, or other unavoidable circumstances which prevent the individual from flying. Aircrew members who enter training after the start of the training period may be prorated. Prorate individual requirements based on the number of full calendar months left in the training period. Use table 4.2 to determine the number of sorties and events required for an individual after proration.

4.3.2.1. After a PCS, stop prorating requirements when the individual receives their PCS station medical clearance from the Flight Surgeon (AF Form 1042, *Medical Recommendation for Flying or Special Operational Duty*).

4.3.2.2. Accept flying training events from previous squadrons with the same MDS, do not prorate the months that you accept flying training events.

4.3.3. **Flight Training.** All aircrew members who maintain basic, mission ready, or mission capable qualification status must accomplish all applicable training requirements of table 4.3. Mission ready and mission capable aircrew members will also comply with the following:

4.3.3.1. Basic qualification aircraft commanders maintaining mission ready copilot status will maintain aircraft currency as an aircraft commander IAW Table 4.3 and mission currency as a copilot IAW the applicable mission ready requirements.

4.3.3.2. Mission capable aircrew members will accomplish at least 50 percent of the applicable mission ready requirements from tables 4.4 through 4.12.

4.3.3.3. Mission ready aircrew members will accomplish all of the applicable mission ready requirements from tables 4.4 through 4.12.

*4.3.3.4. Individuals maintaining navigator/FCO or IR/ALLTV dual qualification will accomplish 50 percent of the requirements shown in table 4.4 or 4.5 for each position.

***4.4. Recurrency/Requalification Training.** Recurrency training is training an aircrew member must accomplish under the supervision of an instructor when currency has been lost. The event resulting in recurrency and each event thereafter are creditable for the current training period. Conduct requalification training under the supervision of an instructor or flight examiner when an aircrew member is non-current in excess of two months**.**

*4.4.1. **Basic Currency/Requalification.** Failure to accomplish a basic currency item that is required every calendar month or 60 days, as appropriate (table 4.3, Note 1), or the semiannual requirements of table 4.3 results in the loss of basic currency (Note: if a C-130E/H qualified crewmember fails to accomplish the semiannual C-130 Sorties [B481] per table 4.3, the crewmember is only non-current/unqualified in the C-130E/H). Basic recurrency/requalification training requirements are shown in table 4.10. Individual proficiency will dictate the number of events to be flown with an instructor or flight examiner to satisfy sortie delinquency (as a minimum, one sortie will be flown).

*4.4.2. **Core Mission Currency/Requalification.** Failure to accomplish all mission currency events that are required every quarter or semiannual period results in loss of mission currency. Loss of currency in certain events does not mean loss of mission currency in all events. Tables 4.4 through 4.9 denote which events result in loss of currency in an event, subarea, or mission; however, non-currency in any core mission event in excess of two months results in loss of mission qualification. Mission recurrency/requalification training requirements are shown in table 4.11. Requalification will be gained by the method the event was originally gained (see definition of Core Mission Event). Loss of mission currency or qualification does not affect basic currency or qualification.

*4.4.3. **Special Mission Currency/Requalification.** Special mission recurrency/requalification training requirements are shown in Table 4.11.1. For special mission qualifications which only require an initial certification by an instructor (as outlined in table 5.1), currency/qualification may be regained by showing proficiency in that event to an instructor. Loss of currency/qualification in a special mission event does not affect mission currency/qualification.

4.5. Multiple Qualifications. Refer to AFI 11-408, *Aircrew Standardization/Evaluation Program Organization and Administration*, AFSOC Sup1 for crew positions, evaluation requirements, and approval authority for multiple qualifications. AETC units refer to AFI 11-408, AETC Sup 1, for multiple qualification requirements

4.5.1. Multiple qualified aircrew members must complete 100% of the requirements of table 4.3 Semiannual Basic Qualification Training Requirements. Volume may be completed in either aircraft, but currency must be maintained in each aircraft. Example: A sortie must be accomplished every 60 days in each MDS. Multiple qualified individuals will maintain Mission Ready status by completing 50% of the mission requirements for each MDS in which qualification is maintained.

*4.5.2. Pilots, Navigators, Flight Engineers, and Loadmasters may satisfy the basic qualification currency requirements of table 4.3 in either their primary aircraft or the C-130E/H. If basic semiannual currency is lost (failure to complete the requirements of table 4.3), it is lost for both aircraft. Lost basic semiannual currency training may be regained in either aircraft. Pilots, flight engineers, and loadmasters (exception: MC-130E/H loadmasters) must complete at least two aircrew proficiency sorties in the C-130E/H semiannually. Failure to complete at least two aircrew proficiency sorties results in lost currency in the C-130E/H and currency must be regained in the C-130E/H. Currency and qualification are regained in the C-130E/H by performing (to the satisfaction of an instructor) a takeoff, approach, and landing in the C-130E/H for pilots and

aircrew proficiency sortie in the C-130E/H for other crew positions as long as basic currency has been maintained in the primary aircraft.

*4.5.2.1. CSOs who are multiple qualified in the MC-130P/E may satisfy their currency requirements in either aircraft. If currency is lost, it is lost in both aircraft.

*4.5.2.2. DSOs and Intel officers on flying status will log 6 combat mission profiles per semiannual period. Missions on any combination of aircraft the operator is qualified in fulfill this requirement (aircraft for which AFSOC is the MCOPR IAW AFI 11-408). To ensure multi-qualified DSOs maintain currency on each airframe, they are required to log one combat mission profile each semiannual period as primary DSO on each aircraft which they hold qualification. Instructors and flight examiners are authorized to credit no more than 3 missions toward semiannual flying training requirements on missions during which they conduct instruction or evaluation (see paragraph 4.12).

*4.5.2.2.1. Combat Mission Profile. To credit this event, the DSO provides inputs to the crew that enhance the crew's situational awareness and supports the defense of the aircraft during any portion of a tactical mission. For MC-130E/H/P, this event should be accomplished during the low level portion of the flight. For AC-130H/U, this event should occur during the dry fire portion of the mission.

4.5.3. The following semiannual mission requirements may be accomplished in the C-130:

4.5.3.1. Pilots and copilots may log all maximum effort operations.

*4.5.3.3. MC-130P crews only: Qualified aircrew may perform personnel, CDS, and bundle drops (Day only).

Section B - Ground Training Requirements

***4.6. General Information.** Table 4.1 designates ground training requirements for all aircrew members. Table notes specify which items are considered either grounding or required for mission ready status. For grounding items, crewmembers will not perform flight duties until the grounding item is satisfied. Crewmembers who are non-current/unqualified in a mission ready Table 4.1 event will only fly on training missions (instructor supervision not required) and will not fly on exercise or contingency missions. Crewmembers who are non-current/unqualified in a training status event will not fly without instructor supervision**.** Training eligibility periods described below may be extended when changing between birth month, evaluation reference date (ERD), or currency reference date (CRD). In all cases, the maximum time span for accomplishment of a training event is 11 months for semiannual, 17 months for annual, 29 months for biennial requirements, and 41 months for training events with a three year requirement adjusted to the end of the month. This process is used to align individuals with their reference date. *AETC aircrews: Aircrew members must maintain currency in all basic qualification ground events and those mission ground training events required to maintain appropriate mission or special mission qualifications (i.e., Hot Refueling qualified aircrew members must attend Hot Refueling annual refresher training). Formal school OG/CCs and squadron CCs determine (in writing) which mission ground training events must be maintained by unit crew members. Mission ground training events are defined as those events required for AFSOCs mission but not required for basic qualification (i.e., Combat Survival and CDTQT are mission ground training events; Aircraft Anti-Hijack and Ground Egress Training are basic qualification ground training events). Do not confuse mission ground training events with AFSOC events labeled Mission Ready Items. If an AETC aircrew member augments an AFSOC mission, HQ AFSOC/DOT must determine which training the augmentee requires. AFSOC will provide the training so that the augmentee is properly trained or coordinate any required waivers. AETC formal school OG/CCs will forward a copy of the ground and flight (MR or MC) currency training requirements that each crew position in each MDS will maintain to HQ 19 AF/DOS with information copies to HQ AETC/DOFS and HQ AFSOC/DOT. Copies of applicable AFORMS tables will suffice. Include a short summary of significant differences between OG required mission ground training events and AFSOC required events.*

4.6.1. **One Time Requirements.** Initial training that does not require refresher training.

4.6.2. **Annual Requirements.** The annual training requirements shown in Table 4.1, if due and completed within the 6 month period prior to the end of the individual's birth month, ERD, or CRD, will remain valid through the end of the birth month, ERD, or CRD of the following year. Events due and completed within the 6 month period after the birth month, ERD, or CRD, will remain valid through the end of the sixth month after the birth month, ERD, or CRD of the following year.

4.6.2.1. Unless otherwise specified, aircrew members should satisfy their annual requirements within the 6 month period prior to the end of their birth month, ERD, or CRD. Each OG/CC may establish CRDs for their flying units as desired, and will forward a copy of new CRDs to HQ AFSOC/DOT. This authority may be delegated to unit commanders. Reference paragraph 4.6 for reference date realignment procedures. AETC OG/CCs will forward a copy of new CRDs to HQ 19 AF/DOS with an information copy to HQ AETC/DOFS and HQ AFSOC/DOT.

4.6.2.2. The annual AFSOC and AETC established training requirements shown in table 4.1 are not required for those aircrew members who will not remain in the command or will be assigned to a non-flying position within 4 months after their due date.

4.6.2.3. Except where HQ USAF directives prohibit, ARC units are authorized to accomplish annual ground training requirements by semiannual periods or during the 6-month period after the birth month, ERD, or CRD. Units using semi-annual periods will ensure training items are accomplished in the same semiannual period as the previous year. Training will remain valid until the last day of the same period the following year.

4.6.3. **Semiannual Requirements.** Events required at intervals of 6 months, January-June and July-December, unless otherwise specified.

4.6.4. **Quarterly Requirements.** Events required each calendar quarter.

4.7. One Time Ground Training Requirements:

*4.7.1. **Basic Survival [SS01].** Accomplish IAW AFCAT 36-2223.

*4.7.2. **Combat Mission Training (Initial) [G071].** Crewmembers will complete initial training in conjunction with mission qualification training. The minimum required material to be included in the course and the knowledge level to be attained are listed in Table 4.12 and AFSOCI 11-207. Aircrew members who can certify that they have previously received initial training in some of the tasked requirements in table 4.12 may credit that training towards completing initial CMT. Intelligence and tactics personnel should conduct this training. AETC aircrew members will complete this training if the Combat Aircrew Training Course is instructed in the formal school as part of the applicable syllabus of instruction.

*4.7.3. **Crew Resource Management (Initial) (CRM) [G231].** AFI 11-290, *Cockpit/Crew Resource Management Training Program*, establishes requirements for developing and managing tailored, mission-specific CRM training programs and requires CRM training for all Air Force aircrew members. CRM training builds on the core CRM curriculum areas of situational awareness, crew coordination, communication, risk management/decision making, task management, and mission planning/debrief. Initial CRM training is a two-day course taught at all formal schools. Initial CRM training may be credited for aircrew members that have documentation of initial CRM at the 314 OG C-130 formal school.

*4.7.4. **DoD High Risk Training [LS14/LS15].** Peacetime Code of Conduct training is required for all AFSOC high risk operators (all aircrew members, special tactics personnel, etc.). High risk is defined as a combination of those operators, because of the nature of their missions, tactics, and Area of Responsibility (AOR), that have a high risk of capture, or due to access to sensitive information, plans or programs, are susceptible to foreign government, terrorist, or enemy exploitation. The training is managed and conducted by the Joint Services SERE Agency (JSSA) as the DoD Executive Agent Action Office or SERE and Code of Conduct Training. LS14 is the identifier for level “B” training and LS15 is the identifier for level “C” training. Training is available as an exportable Level B course (generally one day) for lower risk operators and as a Level C course (academics and practical application) specifically tailored to unit mission. Both levels of training include information in how to deal with peacetime governmental detention and hostage/terrorist survival. The focal point between JSSA and units requiring training are the AFSOC, wing, and unit Liaison (LNOs). Wherever possible, LNOs will be Air Force SERE Training Instructors, who following JSSA indoctrination and training, have the necessary core skills to effectively run this advanced survival training program. The LNO is responsible to identify operators requiring training to JSSA. JSSA, in conjunction with JCS/J-3SOD and USSOCOM will determine risk and appropriate level of training.

*4.7.5. **Forward Area Refueling and Rearming Point (FARRP) Training [G200] (MC-130E/H).** All MC-130E/H crew members will accomplish Phase I FARRP training during initial mission qualification. In addition, FARRP qualified aircraft commanders, loadmasters, HDPs, and flight engineers will receive annual refresher training. Classroom refresher training will review equipment, checklists, and safety procedures. HDPs will accomplish training in conjunction with aircrew training.

*4.7.6. **Ground Egress Training [G021/G020].** Aircrews will complete initial ground egress training during initial qualification training. All crewmembers will receive training prior to their first flight. Both academics and hands-on training are required to complete ground egress training. Academic training will cover the opening of all doors (including ramp and door), emergency escape hatches, and exit instructions. Actual hands-on training will be accomplished in the aircraft and will include opening the crew entrance door, a paratroop door, an emergency escape hatch, a pilot's swing window, and the ramp and door. A qualified instructor LM or FE is required to be present during opening of the ramp and door. AFSOC FEs and LMs only require initial training. AETC FEs and LMs will complete the refresher academic portion annually [G021].

4.7.7. **Night Vision Device (NVD) Training [VV01].** Initial NVD Training is conducted at the formal school. Training will consist of academic and practical use of current NVDs. As a minimum the course will include: eye physiology, illumination, NVD components and performance factors, testing procedures, and mission planning considerations. Students attending initial mission qualification training at AETC formal schools will attend an initial certification course (if not previously certified) that meets the requirements of this instruction, AFI 11-206, and AFI 11-206, *General Flight Rules*/AETC Sup 1. This includes screening by a flight surgeon for Night Vision Goggle(NVG) adaptability. This course will be completed prior to the individual's initial flight with NVGs.

4.7.8. **Psychological Operations (PSYOPS) (MC-130E/H/P) [G072].** All aircrew members will receive an initial course on PSYOPS during mission qualification training.

4.7.9. **Unit/Theater Indoctrination Training [G001].** Each newly assigned aircrew member will complete a local unit/theater indoctrination program prior to performing unsupervised primary aircrew duties. Design this training to prepare them for the unit's operational mission and will, as a minimum, consist of ground training and a local flight. Refer to paragraph 1.10, Unit/Theater Training, for complete requirements.

*4.7.10. **Water Survival [WW01].** Accomplish IAW AFCAT 36-2223.

4.8. Recurring Ground Training Requirements:

4.8.1. **Aircrew Eye and Respiratory Protection System (AERPS)Training [LS04].** AFSOCI 11-301, *Aircrew Life Support Program,* requires initial training within 90 days of arrival to a unit with potential exposure to chemical threats for personnel with no previous AERPS training. AETC aircrew members will complete this training if AERPS is instructed in the formal school as part of the applicable syllabus of instruction. For further guidance, reference Attachment 1 of this instruction.

4.8.2. **Anti-Hijacking [G090].** Accomplish initial and refresher training every two years by reviewing AFI 13-207, *Preventing and Resisting Aircraft Piracy (Hijacking).*

*4.8.3. **Antiterrorism/Force Protection Training [G110].** This training is directed by the chairman, joint chiefs of staff, and will be incorporated as a requirement to AFI 31-210. All DoD personnel will receive predeployment AT/FP training prior to deployment to OCONUS locations. The goal is to standardize training and preparation actions; and bring consistency throughout the DoD. There are four levels of training. Level I is awareness training for all personnel; level II is for the unit AT/FP resource officer (AT/FP RO); level III is for commanders at the O-5/O-6 grades; and level IV is for O-6 to O-8 wing commander, Joint Task Forces, etc. All AFSOC personnel subject to deployment must receive level I training, conducted by AFOSI by way of force protection defensive briefings and/or level II trained POC, based on chapter 12, DoD 0-2000.12H. All individuals will also receive JS guide 5260, *Service Members Personal Protection Guide*, and antiterrorism individual protective measures folding wallet card. This is an annual ground training requirement for aircrew members. If an individual is deployed outside of the six month training window, OSI will conduct predeployment processing to ensure all deploying personnel have received level I training.

4.8.4. **Authentication and Operations Code Systems [G081].** Units will develop local training programs and conduct initial and annual training IAW AFKAO-5, *Instructional Guide for Operations Codes.*

*4.8.5. **Buffer Zone Procedures [G075]**. Follow procedures listed in USAFEI 11-201, *USAFE Buffer Zone Procedures,* and PACAFI 11-201, *Prevention of Inadvertent Overflight of Non-Friendly Borders,* for all aircrews operating in these theaters.

4.8.6. **Chemical Defense Task Qualification Training (CDTQT) [LS05].** Accomplish initial and annual refresher CDTQT IAW attachment 1. AETC crews do not require this training.

*4.8.7. **Combat Mission Training (Refresher) [G070].** Refresher training will contain unit mission, area of operation (AO), and theater specific information. Refer to AFSOCI 11-207 and table 4.12 for guidance about course content. The material in refresher training need only cover areas which are not routinely used and therefore require review. Training may be conducted via a biennial SOPE [G061]. AETC crewmembers will complete this training if SOPEs are instructed in the formal school as part of the applicable syllabus of instruction.

4.8.8. **Combat Survival Continuation Training (CSCT) [LS02].** This training will consist of the evasion and survival field training exercise and will also encompass the principles, procedures, and techniques required to use standard life support equipment in a survival situation. All aircrew members will accomplish CSCT every 3 years. Refer to AFSOCI 11-301. AETC crews do not require this training.

*4.8.9. **Crew Resource Management (Refresher) [G230].**. Annual refresher training is designed to reinforce the aircrew's CRM academic knowledge and refocus on skills that lead to successful mission accomplishment. CRM skills should be inseparable parts of operational practices. Those aircrew members who attend an annual simulator refresher course, which teaches CRM refresher as part of its program, can credit their annual CRM refresher requirement if the training is conducted with a thorough cross section of crewmembers. Otherwise, have a unit facilitator conduct CRM refresher with a thorough cross section of crewmembers at a location of choice. As a rule of thumb, try to have at least one crewmember per crew position present. The cross section in attendance can span other AFSOC weapon systems since shared experiences across the command is valuable and enhances training. Phase period for CRM refresher is the six month period after the last day of member's birth month.

*4.8.10. **Fire Extinguisher Training [G022].** AFOSH Standard 127-56, *Fire Protection and Prevention*, requires this training upon arriving PCS to a new flying unit. This training will familiarize crewmembers in the use of the type of fire extinguishers onboard their assigned aircraft.

*****4.8.11**. Flight Physical [PP01].** Accomplish this event annually IAW AFI 41-210**.**

*4.8.12. **Forward Area Refueling and Rearming Point (FARRP) Refresher [G201].** Designated MC-130E/H FARRP qualified ACs, FEs, LMs, and HDPs will receive annual academic refresher training. Academic refresher training will review equipment, checklists, and safety procedures. HDPs will accomplish training in conjunction with aircrew training. Crewmembers who are overdue this training will not conduct FARRP operations.

*4.8.13. **Ground Chemical Defense Ensemble [G010].** Conduct IAW AFSOCI 11-301. This training is required within 90 days after PCS if arriving from a non-mobility status unit. AFRC units will conduct GCDE Refresher every two years (IAW AFI 32-4001/AFRES Sup 1)**.** Not required for AETC aircrews.

*4.8.14. **Ground Egress Training [G021/G020]**. Aircrews will complete initial ground egress training during initial qualification training. All crewmembers will receive training prior to their first flight. Both academics and hands-on training are required to complete ground egress training. Academic training will cover the opening of all doors (including ramp and door), emergency escape hatches, and exit instructions. Actual hands-on training will be accomplished in the aircraft and will include opening the crew entrance door, a paratroop door, an emergency escape hatch, a pilot's swing window, and the ramp and door. A qualified instructor LM or FE is required to be present during opening of the ramp and door. AFSOC FEs and LMs only require initial training. AETC FEs and LMs will complete the refresher academic portion annually [GO21].

*4.8.15. **IFF/SIF Identify Friend or Foe/ Selective Identification Frequency Procedures [G082].** Pilots and communication system operators will receive annual training in IFF/SIF procedures and operation of IFF/SIF equipment. This training will include MDS equipment specific operating procedures.

*4.8.16. **Isolated Personnel Report (ISOPREP) [G120].** Accomplish a semiannual review IAW AFI 14-105

*4.8.17. **Law of Armed Conflict (LOAC) [G100]**. Aircrew members will receive annual training in the principles and rules of LOAC IAW AFI 51-401, *Training and Reporting to Ensure Compliance with the Law of Armed Conflict*. At a minimum, training will include subjects required by the 1949 Geneva Conventions for the Protection of War Victims and the Hague Convention IV respecting the Laws and Customs of War on Land of 1907.

4.8.18. **Life Support Equipment Training [LS06].** Accomplish annual refresher training on life support equipment carried onboard unit aircraft IAW AFSOCI 11-301.

*4.8.19. **Marshaling Exam [G002].** Normally, accomplish this training within 30 days upon arrival PCS to a flying unit or prior to first flight IAW AFI 11-218, *Aircraft Operation and Movement on the Ground*. Crewmembers may complete this exam at a formal schoolhouse en route to a duty station if upon arrival at duty station, a test covering local airfield parking and taxi restrictions is given.

*4.8.20. **Physiological Training (Refresher) [PP11]**. Conduct every three years IAW AFI 11-403.

4.8.21. **Pyrotechnic Training [G183] (AC/MC-130P).** Conduct initial and annual refresher training IAW AFI 91-202 *Air Force Mishap Prevention Program*. This training will include a discussion of the unit explosive safety operating instruction and applies to loadmasters and aerial gunners.

4.8.22. **Radar Refresher Course [G226] (MC-130E/H).** All pilots, navigators, and MC-130H EWOs will attend an annual terrain following radar refresher course.

*4.8.23. **Safe Passage/Minimum Risk [G062].** Conduct annual refresher training. Pilots, navigators, and CSOs must be proficient and familiar with wartime safe passage/minimum risk procedures as specified by appropriate theater directives.

4.8.24. **Security Control of Air Traffic and Air Navigational Aids (SCATANA) [G300].** Pilots, navigators, and CSOs will review SCATANA procedures during initial and refresher training, which is required every 2 years (CONUS-based aircrews only).

*4.8.25. **Self Aid and Buddy Care [G941].** Conduct every two years IAW AFI 36-2238.

*4.8.26. **Small Arms Training [G280(M-9)/G286(M-16)].** AFSOC fixed wing aircrew members are considered Group C and must qualify on assigned weapons IAW AFI 36-2226, *Combat Arms Training and Maintenance Program*. AFCAT 21-209, *Ground Munitions*, authorizes many types of ground munitions for skill sustainment (proficiency) training. Unit commanders may designate crewmembers as Group B at their discretion IAW the unit security plan (Group B individuals have an annual small arms requirement).

*4.8.27. **Special Operations Planning Exercise (SOPE) [G061].** Consists of a combat mission planning exercise and verification outbrief. Acquaints and refreshes crews with real world mission planning procedures. If possible, conduct SOPEs as an initial assessment in support of an operational or concept plan (OPLAN/CONPLAN) tasking. Tactics and intelligence personnel should prepare the required items and information to minimize the time required by the crew to accomplish the SOPE but maximize the training. Participation in the planning and briefing of an operational, contingency, or exercise mission may be substituted for a SOPE and verification outbriefing. SOPEs are biennial requirements for all crewmembers maintaining mission ready status. This training may credit Combat Mission Training Refresher if applicable items in table 4.12 are covered. AETC crewmembers will complete this training if SOPEs are instructed in the formal school as part of the applicable syllabus of instruction.

*4.8.28. **Tactical Employment/Threat Open Book Test [G063].** All crewmembers will satisfactorily complete a 50 question open book test derived from AFSOCM 11-1, *Tactical Employment*. Minimum passing grade is 85%. Group tactics offices will develop and administer the test IAW local procedures and HQ AFSOC/DOXT guidance. If a crewmember fails this test, the group tactics officer will forward his name to the squadron director of operations who will direct additional training and a retest.

4.8.29. **Threat Signal Recognition Training System(TSRTS) [G073]**. AC/MC-130 EWOs will review threat signals on the TSRTS semiannually. AC/MC-130P pilots and MC-130P navigators will review threats annually.

*4.8.30. **Water Survival Continuation Training [LS03].** Refer to AFSOCI 11-301. Attend water survival continuation training every three years. It consists of "hands on" training for each crewmember with all weapons system specific flotation devices and components available during an overwater emergency. This training emphasizes survivor needs using water survival related equipment and procedures.. Personnel arriving PCS during a period when water survival training is not available (i.e., winter months), are granted a waiver to this requirement until 60 days following the next scheduled training date. Not required for AETC aircrews.

4.9. Recurring Aircrew Refresher Training Requirements:

4.9.1. **Pilot /Flight Engineer Simulator Refresher [G250].** Pilots and flight engineers qualified in an AFSOC C-130 type aircraft IAW chapter 2 will complete an annual simulator refresher course as outlined in this instruction at attachment 2. A complete MC-130P crew will attend the MC-130P WST at Kirtland AFB. The eligibility period is the 6 month period after the birth month, ERD, or CRD. EXCEPTION: Overseas units at short tour locations without access to a simulator may establish due dates based on the 17 month rule from date last accomplished.

4.9.1.1. ANG unit commanders may exempt an aircrew member (excluding air technicians) if the simulator course is not available or the individual cannot attend the course. ANG personnel who do not attend annual simulator refresher will conduct a sufficient academic review of refresher training course and fly a proficiency flight emphasizing emergency procedures.

4.9.1.2. Simulator refresher training is not required for aircrew members who will not be flying the same or similar aircraft beyond 4 months after their due date.

4.9.1.3. Instructors are exempt by instructing one simulator refresher course during the annual training period.

4.9.1.4. Satisfactory completion of formal school basic qualification, requalification, aircraft commander or instructor pilot upgrade course which includes instruction in a C-130 type simulator satisfies the annual simulator refresher course requirement.

4.9.1.5. Requests for waivers to annual simulator refresher training will contain proposed alternate means of attaining the training objectives.

*4.9.2. **Instrument Refresher Course (IRC) [G130].** All pilots will complete the IRC IAW AFI 11-408, *Aircrew Standardization/Evaluation Program Organization and Administration*. AETC navigators and EWOs must attend an IRC that meets the requirements of AFMAN 11-210, *Instrument Refresher Course (IRC) Program*. This requirement may be met in a navigator/EWO specific course. Instructors must meet the requirements of AFMAN 11-210. In addition, navigators and EWOs must complete the IRC written examination (AETC only). ARC units may conduct refresher classes for those crewmembers unable to attend the formal course, IAW AFMAN 11-210.

*4.9.3. **Navigator Refresher [G225]..** Navigators will complete an annual refresher course as outlined in this instruction at attachment 3 during the 6 month period after the last day of their birth month, ERD, or CRD. 58 SOW will ensure all MC-130P navigators complete applicable items in Attachment 4, EWO Refresher Course, during Navigator Refresher. This training will be conducted by the formal school if the formal school has an operational Navigator Refresher course. ARC units may conduct refresher classes for those crewmembers unable to attend the formal course.

*4.9.4. **EWO Refresher [G222].** EWOs will complete an annual refresher course as outlined in attachment 4 during the 6 month period after the last day of their birth month, ERD or CRD. This training will be conducted by the formal school if the formal school has an operational EWO Refresher course. ARC units may conduct refresher classes for those crewmembers unable to attend the formal course.

*4.9.5. **Flight Engineer Systems Refresher [G223].** Flight engineers will complete an annual systems refresher course as outlined at attachment 5 during the 6 month period prior to the last day of their birth month, ERD or CRD. HQ AFSOC/DOV flight engineers are exempt from phase periods for this training. ARC units may conduct refresher classes for those crewmembers unable to attend the formal course.

*4.9.6. **CSO Refresher [G221].** CSOs will complete an annual refresher course as outlined in attachment 6 during the 6 month period after the last day of their birth month, ERD or CRD. This training will be conducted by the formal school if the formal school has an operational CSO Refresher course. ARC units may conduct refresher classes for those crewmembers unable to attend the formal course.

*4.9.7. **Loadmaster Refresher [G224].** Loadmasters will attend an annual loadmaster refresher course as outlined at attachment 7 during the 6 month period after the last day of their birth month, ERD or CRD. HQ AFSOC/DOV loadmasters are exempt from this training. This training will be conducted by the formal school if the formal school has an operational

Loadmaster Refresher course. ARC units may conduct refresher classes for those crewmembers unable to attend the formal course.

***4.10. Use of the Air Force Operations Resource Management System (AFORMS).** All units will develop local procedures to ensure aircrew ground and flying training is properly documented and updated in AFORMS. Each unit will provide a printed copy of current ground and flying training summaries to each individual prior to PCS.

4.11. Block Training. The block training course should include all recurring ground training required to maintain readiness (except physiological training, physical examinations, and simulator refresher) for aircrew members assigned or attached to active duty units. ARC units are encouraged to use this concept whenever possible.

4.11.1. Each group operations training office will establish and administer a centralized aircrew block training session.

4.11.2. Do not remove aircrew members entered in block or refresher training until course completion unless approved by the group commander or deputy commander.

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4.12. Instructor/Flight Examiner Training Requirements. Instructors and flight examiners will comply with Table 4.3, Semiannual Basic Qualification, and the appropriate table for semiannual mission ready flying requirements. Fifty percent of semiannual flying training requirements may be credited while performing instructor or examiner duties except where noted. IPs may credit events accomplished in either seat. Mission Capable instructors/Flight Examiners must complete fifty percent of their Mission Ready requirements while performing primary crew duties and cannot credit events while instructing or evaluating. Currency may not be reset for an event in which an instructor/Flight Examiner instructed/evaluated a student/examinee performing the event. Example: An instructor may credit a non-precision approach flown by a student under his/her supervision toward his semi-annual non-precision approach requirement. However, that instructor pilot may not credit this approach toward the aircrew proficiency sortie or instrument approach required every calendar month.

NOTE: Instructors who credit events in a simulator must still accomplish at least 25 percent of these events while performing as a primary aircrew member in the aircraft. For example, an instructor who requires 12 events may log six in the simulator (3 may be while instructing) and 6 in the aircraft (3 must be while performing actual aircrew duties).

4.13. Basic Qualification Event Definitions. The following event definitions apply to table 4.3, Semiannual Basic Qualification Flying Training Requirements:

4.13.1. **Aircrew Proficiency Sortie.** An aircrew proficiency sortie may be logged for an individual who is flying in a primary crew position and meets the following position specific criteria:

4.13.1.1. Pilots must accomplish at least three events from tables 4.3 through 4.9 to log an aircrew proficiency sortie. Credit multiple sorties on multi-leg missions with full-stop landings.

4.13.1.2. Navigators may log an aircrew proficiency sortie when they monitor a departure and approach. Minimum flying time is 30 minutes. A navigation profile may also be credited for a proficiency sortie. Navigators will not take credit for more than one navigation profile on any one flight. If more than one qualified navigator is on a flight, each may obtain sortie credit on the same flight provided each one occupies a navigator position and performs navigator duties.

*4.13.1.3. Other aircrew members may credit a sortie when they perform appropriate preflight, inflight, and postflight duties in their primary crew position Other crewmembers may also credit same day sorties not requiring preflight/postflight duties (credit multiple sorties on multi-leg missions with full stop landings).4.13.1.4. Multiple aircraft qualified crewmembers may credit basic proficiency and/or mission sorties on any aircraft in which qualification is maintained. Events which can be credited are based on qualification held in each MDS.

*4.13.2. **Pilot Local Proficiency Sortie (LPS).** A local training mission including at least one hour of primary or instructor time practicing instrument, transition, and emergency procedures. Fly maneuvers under the supervision of an IP and repeat them until an acceptable level of proficiency is attained or the LPS may not be credited. If the LPS is incomplete, the instructor will recommend whether the entire LPS or just the incomplete events must be reaccomplished. Instructors and Flight Examiners need not complete all LPS events on a single sortie. Credit a LPS when all events are complete. When

conditions permit, simulated two-engine-out landings, windmill taxi starts, and simulated three engine takeoffs (except AC-130) should be practiced by aircraft commanders and demonstrated to copilots. IPs and EPs are not required to fly with another IP to credit this event. Unit commanders may add to the following minimum LPS sortie criteria (exception: ANG units will develop local LPS guidelines):

4.13.2.1. A review of boldface emergency procedures.

4.13.2.2. Two instrument approaches.

4.13.2.3. A holding pattern or procedure turn.

4.13.2.4. A circling approach (traffic permitting).

4.13.2.5. A simulated engine out landing.

4.13.2.6. A simulated engine out go-around.

4.13.2.7. A VFR traffic pattern (weather permitting).

4.13.2.8. 100%, 50%, and no flap landings (aircraft commanders).

*4.13.3. **Circling Maneuver.** Conduct IAW AFI 11-217.

4.13.4. **Holding Patterns.** Holding patterns consist of entry into a holding pattern and at least two complete circuits.

4.13.5. **Navigation Profile (Day/Night).** A navigation profile consists of a minimum of 2 hours over a Category I route maintaining a log using dead reckoning, celestial, and range control procedures. Navigators will use basic log procedures as defined in AFI 11-206 General Flight Rules and applicable volumes of AFSOCI 11-202.

4.13.5.1. Navigators may use two-body fixes (sun-moon, sun-planet, moon-planet) for night celestial profile.

4.13.5.2. Units whose primary aircraft are equipped with dual INS or SCNS/INS and GPS do not have to accomplish navigation profiles.

4.13.6. **Basic Navigation Profile (EC-130E only).** A minimum of 3 hours over a category I route maintaining a log using dead reckoning, celestial, pressure pattern, and range control procedures. Use of onboard navigational computers (SCNS, INS, DOPPLER, GPS) will be denied with the exception of computer supplied drift and groundspeed. Navigator will provide manually derived heading/ETA information in lieu of autopilot coupled computer steering. Flight planning and fuel computation for the entire flight will be accomplished manually using approved forms. Computer generated flightplans or fuel calculations are not acceptable. Basic Nav Profiles can only be accomplished with an instructor/Flight Examiner Navigator onboard to monitor course tolerance.

*4.13.6.1. **Integrated Navigation Profile (EC-130E only).** A minimum of 3 hours over a category I route maintaining a log, using all available navigational aids, and range control procedures. Computer generated flightplans or fuel calculations are acceptable.

4.13.7. **Night Celestial Fix (EC-130E only).** A position derived from the intersection of two or more Lines Of Position (LOPs) plotted on a chart based on the mathematical resolution of visual observations obtained from two or more celestial bodies other than the sun. Multiple requirements may be logged on one sortie.

4.14. AC-130 Mission Event Definitions and Accrediting Criteria (Tables 4.4 and 4.5):

*4.14.2. **Dry Fire** The dry fire event will consist of a crew planned profile including any combination of the following missions: close air support/troops in contact, interdiction, or armed reconnaissance. A realistic threat scenario must be planned to enhance the crews combat readiness. Offset dry firing should be included when possible. Aerial gunners must operate at least one weapon from combat entry to combat exit to credit a dry fire profile. On flights where multiple dry fire scenarios are executed, multiple dry fire events may be logged. Time between dry fire events will not exceed 60 days

4.14.2.1. **Close Air Support/Troops in Contact (CAS/TIC).** Operations with ground teams are highly desirable. If ground teams are not available, prepared scenarios may be substituted. Target positions should be determined using a physical description or electronic data (ASD-5/APQ-150/APQ-180). Both direct and offset modes should be employed. Surface escort situations such as irregular patterns, halting the convoy, simulated fire on enemy positions, etc., should be practiced.

*4.14.2.2**. Interdiction.** Operations against prebriefed or preplanned targets in an area. Interdiction targets should be attacked at a preplanned time over target(TOT) if possible. TOTs should be planned to orbit tangent or round impact.

4.14.2.3. **Armed Reconnaissance.** This requires positioning the aircraft within range of a line of communication(LOC) for productive training. Position may be maintained by any and all means available.

4.14.2.4. **Offset Dry Firing.** This includes all aspects of a live offset except actually loading and firing the weapons. This training should be done in conjunction with ground teams using Selective Strike Beacon (SSB) coded instructions when possible.

*4.14.3. **Combat Mission Profile.** To log this event, the aircrew must log either a dry fire or a live fire profile, and perform at least one aircraft defense maneuver based on a realistic threat scenario. DSOs will credit this event IAW para 4.5.2.2.1.

*4.14.4. **Live Fire.** This event requires weapons selection, tweak, and accurate expenditure of ordnance on selected targets. Firing of all weapons is desired. Offset live firing should be accomplished. Aerial gunners must operate at least one weapon in all phases from preflight to poststrike to credit a live fire profile.

4.14.5. **Offset Live Firing.** This requires expenditure of ordnance on selected targets using offset techniques. Use the ASD-5, APQ-150, or APQ-180, as the primary tracking sensor when available. Make adjustments as necessary to improve accuracy. Multiple offset firings may be credited if accuracy adjustments are made for different targets. A live offset normally consists of a minimum of two shots, the second and following shots being correcting shots.

*4.14.6. **Radar Profile.** The radar must be used for simulated or actual target acquisition and engagement. Projectile Impact Point Prediction (PIPP) must be used during live fires.

4.14.7. **Electronic Warfare Operations:**

4.14.7.1. **Ground Radar Event.** Engagement with a ground or shipborne SAM/AAA radar site or radar simulator. Multiple events per sortie may be credited if engagements are clearly distinct with respect to time and tactical situation. Each event will include a minimum of 15 minutes activity.

4.14.7.2. **Expendable Events.** Accomplish these events in conjunction with ground radar events or aircraft defense to the maximum extent possible. Program and drop chaff or flares to credit an event. Only one event may be credited by each EWO per mission.

4.14.8. **Inflight Refueling (IFR).** Crewmembers will accomplish rendezvous, contact (except navigators), and post inflight refueling procedures to receive credit. Contact qualified pilots must maintain 10 minutes of contact time with no more than two inadvertent disconnects after initial contact. Contact qualified pilots may credit refueling events from either pilot seat.

*4.14.9. **Dual Target Attack (DTA).** DTA involves the use of fire control channels A and B and the inherent capabilities of the AC-130U, using any combination of sensors and guns, in any computer-aided fire control mode. Additionally, exercise the capability to attack geographically separated targets using appropriate gun/sensor combinations. This event may be credited when accomplished during either the live fire or dry fire phases of flight.

4.14.10. **Night Low Level.** Use procedures IAW applicable volumes of AFSOCI 11-202. A route will be flown in conjunction with a TOT to a preplanned target. Minimum time in route is one hour. Time between routes will not exceed 60 days for pilots, navigators and FCOs.

4.15. EC-130 Mission Event Definitions and Accrediting Criteria (Table 4.9):

4.15.1. **Combat Mission Profile.** This event will consist of completing either a trailing wire, narrow band, or wide band position employment profile. Include a realistic threat scenario during mission planning. Time between profiles will not exceed 60 days.

4.15.2. **Trailing Wire Positions.** Operate the MF/HF system into a dummy load or trailing wire antenna. Supply, monitor, and record programming on an actual or simulated operational mission in accomplishment of a mission log line. Include notes 1 through 5.

4.15.3. **Narrow Band Position(s).** Operate the VHF/UHF system into a dummy load or antenna. Supply, monitor, and record programming on an actual or simulated operational mission in accomplishment of a mission log line. Include notes 1 through 5.

4.15.4. **Wide Band (1) Position.** Operate the VHF/UHF Video system into a dummy load or antenna and analyze output product as required to accomplish a mission log line. Include notes 1 through 4.

4.15.5. **Wide Band (2) Position.** Operate the VHF/UHF Video system. Supply, monitor, and record programming from different video and audio sources and analyze output product as required to accomplish a mission log line. Include notes 1 and 5.

4.15.6. **Program Technician Position.** Supply, monitor, and record programming, support other positions and assist Mission Chief when workload dictates on actual or simulated operational missions as required to accomplish a mission log line. Include notes 1 and 5.

NOTE 1. Program Checks: Operator will ensure that tapes are labeled, program order and usable material established, system patching levels set and material cued. Credit one event per sortie per mission crew portion.

NOTE 2. Antenna System Check: Operator will ensure operating frequency activity is checked. Also deploy and retrieve antenna systems and perform VSWR checks. Credit one event per sortie per mission crew position.

NOTE 3. Amplifier Checks: Operator will perform reliability checks to include frequencies and power level. Credit one event per sortie per mission crew position.

NOTE 4. Systems Check: Operator will perform a transmitter analysis on modulation, input/output level quality checks, Hum, Noise, Spurious and Harmonics analysis. Credit one event per sortie per mission crew position.

NOTE 5. Event Operation: Operator will accomplish the timely application and mixing/switching of programming material. Credit one event per sortie per mission crew position.

4.15.7. **Inflight Refueling.** Crewmembers will accomplish rendezvous, contact (except navigators), and post inflight refueling procedures to receive credit. Contact qualified pilots must maintain 10 minutes of contact time with no more than two inadvertent disconnects after initial contact. Contact qualified pilots may credit refueling events from either pilot seat.

4.16. MC-130P Mission Event Definitions and Accrediting Criteria (Table 4.6).

4.16.1. **SOFI Conversion Training.** SOFI certification training is required for the pilot, copilot, left nav, right nav, FE, CSO, and LM aircrew positions). Graduated SOFI upgrade training is encouraged and can be separated into Basic SOFI qualification and Mission SOFI qualification.

4.16.1.1. **Basic SOFI.** Entries on the AF Form 1381 will be "Basic SOFI…" followed by crew position (i.e. Basic SOFI right nav or Basic SOFI loadmaster). Demonstrate competent working knowledge of new systems to an instructor (same crew position). IPs should ensure students can safely fly in both day and night non-tactical environments, capable of accomplishing any event defined in table 4.3 of this instruction. Ground training should include hands-on training at the aircraft. Pilots and navigators are the only crew positions required to fly prior to certification. Pilots must accomplish a takeoff, approach, and landing with an IP while navigators fly long enough to demonstrate competence utilizing the new equipment. Conduct training with either formal school courseware, 19 AF Form 14s, or HQ AFSOC/DOT approved AFSOC 672s.

4.16.1.2. **Mission SOFI.** Entries in the AF Form 1381 will be "Mission SOFI…" followed by crew position (i.e. Mission SOFI right nav or Mission SOFI loadmaster). Pilots can be certified as NonVSDS Mission SOFI prior to VSDS Mission SOFI, make appropriate entry on the 1381. Conduct training with either formal school courseware, 19 AF Form 14s, or HQ AFSOC/DOT approved AFSOC 672s.

*4.16.2. **Combat Mission Profile.** Fly an NVG low level route in conjunction with an ARCT/TOT/TOA to an AR (actual or simulated), airdrop (actual or simulated), helicopter AR, or airland event. Use procedures IAW applicable volume(s) of AFI 11-2MC-130. Minimum time en route is one hour. Include a realistic threat scenario and at least one aircraft defensive maneuver for each event. Time between sorties for pilots, CPs, and navigators will not exceed 60 days. DSOs refer to paragraph 4.5.2.2.1 for crediting criteria.

4.16.2.1. Navigators must fly as the left navigator during the low level to credit this event in non-SOFI aircraft.

4.16.2.2. Squadron Intelligence Officers will brief the crew on a realistic threat scenario using the Aircrew Intelligence Training (AIT) courseware or other reliable source. Not applicable to AETC units.

4.16.3. **Helicopter Air Refueling (AR).** Accomplish IAW applicable volume(s) of AFSOCI 11-202 and the appropriate technical orders. Pilots may credit any type of rendezvous for this event. Navigators must use an electronic aid to direct the aircraft in order to credit this event. Timing criteria is on-time to one minute late for an ARCT. Flight engineers must complete the Air Refueling checklist to credit the event. Loadmasters must have actual contact by a helicopter to credit this event. Fuel does not have to be transferred after contact to receive credit.

4.16.4. **Airland Operations.** Pilots and copilots will accomplish this training in their respective crew positions and comply with procedures IAW applicable volumes of AFSOCI 11-202. TOT is ±30 seconds for airland. Pilot requals who were previously qualified in airland operations within 24 months may be trained and evaluated to a normal runway, simulate shortfield operations. Outside 24 months, conduct requalification IAW AFSOCI 11-408.

*4.16.4.1. **Maximum Effort Landings.** These may be credited when accomplished on surfaces that meet the criteria prescribed in applicable volume(s) of AFSOCI 11-202. Landing zones should normally be 3,500 feet or less. When conducting this training to a normal runway, simulate the landing to a shortfield by thoroughly briefing appropriate shortfield procedures and runway markings for the simulated landing zone. Landings may be credited only when the point of touchdown is within the applicable zone. Do not credit go-arounds. Max effort landings may be used to credit Table 4.3 landing requirements.

*4.16.4.2. **Maximum Effort Takeoffs.** Accomplish takeoffs IAW applicable volume(s) of AFSOCI 11-202. Max effort takeoffs may be used to credit Table 4.3 takeoff requirements.

*4.16.4.3. **NVG Landing.** Accomplish IAW applicable volume(s) of AFSOCI 11-202. Landing zones will be a minimum of 3800 feet long. Covert lighting will be used for marking the landing zone (exception: SOFI modified aircraft with an operable IDS may land on a blacked out runway). Credit all landings in which the aircraft can be stopped at the prebriefed location or can turn off the runway at the planned exit location. NVG landings may be used to credit Table 4.3 landing requirements. NVG Landings can dual credit Total Max Effort Landings (night) if flown to a 500' zone on a marked runway. Do not dual credit landings to unmarked "blacked-out" runways.

*4.16.4.3.1. **NVG Takeoff.** Accomplish IAW applicable volume(s) of AFSOCI 11-202. NVG takeoffs flown using max effort procedures may be credited toward Total Max Effort Takeoffs (night). NVG takeoffs may be used to credit Table 4.3 takeoff requirements.

*4.16.4.4. **Self-Contained Approach (SCA).** Accomplish IAW applicable volume(s) of AFSOCI 11-202. SCAs may be credited if the pilot determines a landing could be made from the approach after reaching the minimum descent altitude(MDA) and prior to the missed approach point(MAP). Only the pilot flying the approach and left navigator may credit this event. Pilots will not credit SCAs toward Table 4.3 approach requirements.

4.16.4.5. **NVG Go-Around.** Accomplished in conjunction with an approach to an NVG landing event in which either an actual or simulated missed approach must be executed. Initiate the go-around at a safe altitude and airspeed.

4.16.4.6. **Infil/Exfil.** The immediate onload or offload of personnel/equipment on the runway or taxiway. This on/offload method is normally employed by two loadmasters at night during NVG operations. Minimum requirements are to complete

the Infil/Exfil checklist while on/offloading personnel and/or any vehicle certified for rapid Infil/Exfil. At least one event per semiannual period must be accomplished using a four-wheeled vehicle.

*4.16.5. **Formation Sortie.** Complete a fixed-wing rejoin with another MC-130 and fly 30 minutes in the wing position IAW AFSOCI 11-202 to credit this event. Each pilot should fly approximately 15 minutes wing time. Two or more MC-130's are considered in formation when under the command of a designated mission commander or formation commander, operating in close proximity with each aircraft commander assuming responsibility for their aircraft position relative to the others in the same formation. Wingmen must begin the fixed- wing rejoin with at least 2 miles separation and close to spare tanker position. Crew members may dual log applicable requirements accomplished during the course of a formation sortie. Crewmembers who are non-current in this event will not fly formation and will only fly single ship helicopter air refueling.

*4.16.5.1. **Night Formation Sortie.** Fly a formation sortie at night using NVGs.

*4.16.5.2. **Formation Helicopter Refueling.** Fly rendezvous in formation with another MC-130 to an Option I or Option II helicopter air refueling IAW T.O. 1-1C1-20. When flying as Lead or wingmen during an Option 2 rendezvous, the rendezvous must be flown to actual helicopters to log this event. Wingmen during an Option 1 rendezvous may credit one of the two required semiannual rendezvous using a simulated helicopter.

*4.16.5.3. **Weather Penetration/Lost Contact.** If performed on a low level route, conduct inadvertent weather penetration procedure IAW AFSOCI 11-202. Include formation separation and position keeping for a minimum of one leg, a turn over an enroute checkpoint, and a formation rejoin. If performed on the AR track, conduct lost contact procedure IAW T.O. 1-1C1-20.

*4.16.5.4. **Formation Downwind/Overhead Recoveries.** Conduct IAW AFSOCI 11-202. May be flown single ship; however, attempt to accomplish in formation. The Group CC will determine the number of pilots who maintain this qualification. Loss of currency for this event never results in loss of mission qualification. Pilots who are non-current in this event must re-establish currency by accomplishing a formation recovery under the supervision of an IP or retrain to a 3C level if noncurrency exceeds 2 months. Pilots non-current in this event may practice recovery procedures while single ship only (do not log in AFORMS).

4.16.6. **Airdrop Operations.** Accomplish IAW applicable volume(s) of AFSOCI 11-202. An Actual Airdrop must be scored and can either be a Personnel, bundle, or Container Delivery System(CDS) drop. TOT criteria is ±30 seconds. Credit all airdrops that land within 300 meters of the aim point as successful. Pilots may credit airdrops when performing pilot or copilot duties. An off drop zone drop is not a successful drop. Off drop zone drops require immediate reporting IAW AFR 55-40 (AFJI 13-210), AFSOC Sup 1. AETC units will comply with AFR 55-40, AFSOC Sup 1, except that all reports will be addressed to HQ AETC/DOFS with informational copies to HQ 19 AF/DOS and HQ AFSOC/DOX. Additional training is at the discretion of the unit's operations officer.

4.16.6.1. Pilots and Navigators may credit up to 50 percent of their total Airdrop (per semiannual) requirement with Standard Airdrop Training Bundle(SATB) drops.

4.16.6.1. Pilots will not credit simulated/dry pass airdrops toward their total Airdrop requirement.

4.16.6.2. Navigators must compute a Computed Air Release Point(CARP) or High Altitude Release Point(HARP) to credit an airdrop.

4.16.6.3. Loadmasters must complete an actual drop for credit unless an unplanned "no drop" is called after completion of the "one minute warning" through no fault of the crew and no racetrack is planned. Loadmasters may credit off drop zone drops.

4.16.6.4. **Psyop/Leaflet Drop.** Accomplish IAW AFSOCI 11-202, volume 15 and make a AF Form 1381 entry in FEF. All aircrew members will receive an initial course on PSYOPS during mission qualification training. Navigators and loadmasters require annual refresher training (accomplished during Navigator and Loadmaster Refresher). There is no semiannual flight training required for this event.

4.16.7. **Inflight Refueling (IFR).** Crewmembers will accomplish rendezvous, contact (except navigators), and post inflight refueling procedures to receive credit. Contact qualified pilots must maintain 10 minutes of contact time with no more than two inadvertent disconnects after initial contact. Contact qualified pilots may credit refueling events from either pilot seat.

4.16.8. **Electronic Warfare Operations:**

4.16.8.1. Ground Radar Event. Engagement with a ground or shipborne SAM/AAA radar site or radar simulator. Multiple events per sortie may be credited if engagements are clearly distinct with respect to time and tactical situation. Each event will include a minimum of 15 minutes activity. Both navigators may credit this event if actively involved with the engagement. This event may be credited in the WST.

4.16.8.2. Expendable Events. If actual chaff and flares are not available, "dry fire" the ALE-40 system in conjunction with ground radar events or NVG low level events to the maximum extent possible. This event may be credited in the WST.

4.16.9. **Communications Events:**

4.16.9.1. **Secure Voice.** Load the secure voice device IAW the appropriate checklists/instructions. Establish two-way contact in both the clear and secure modes. This may be accomplished to any station, including another member of your formation. Only one KY-58 and one KY-75 event per mission may be logged.

4.16.9.2. **Authentication.** Challenge and reply with a distant station. Only one event may be credited per mission.

4.16.9.3. **Anti-jam.** Set up and operate the radio in anti-jam mode (HAVE QUICK or SINCGARS). Establish contact with a distant station and pass a message in the active anti-jam mode. Only one event per mission may be logged.

4.16.9.4. **Air Traffic Control (ATC) Communication(comm).** ATC comm event can be logged for any mission where communications is established with Oceanic Area Control, Air Route Traffic Control Center, airfield approach, departure, tower facilities or similar agency(e.g., Eglin Mission). Maximum of one event per flight may be logged.

4.16.9.5. **Command/Control Comm.** Command/Control comm event can be logged for any mission where an execution checklist or mission brevity codes are utilized for command and control. Maximum of one event per flight may be logged.

4.16.9.6. **Tactical Comm.** Tactical comm event can be logged for any mission where comm is established with a combat control team (CCT), special tactics squad (STS), landing zone controller (LZC), drop zone controller (DZC) or other similar ground party during mission events. Maximum of one event per flight may be logged.

4.16.9.7. **NVG Scanner.** NVG scanner event can be logged for any mission where the CSO performs scanning duties during aircraft taxi or actual/simulated treats. Maximum of one event per flight may be logged.

4.17. MC-130E/H Mission Event Definitions and Accrediting Criteria (Tables 4.7 and 4.8):

*4.17.1. **Combat Mission Profile** A Combat Mission Profile will include either a TF, NVG, or visual low level event and will incorporate a TOT/TOA/ARCT to one of the following: an airdrop (actual or simulated), airland event, inflight refueling, or helicopter air refueling (AR)(actual or simulated). TOT/TOA criteria for airdrop or airland is +/-30 seconds. ARCT criteria for helicopter air refueling is on time to two minutes late. ARCT criteria for inflight refueling is one minute early to on time. Include a realistic threat scenario and at least one defensive maneuver to credit a Combat Mission Profile. DSOs will credit this event IAW para 4.5.2.2.1. Time between profiles will not exceed 60 days for Pilots, Navs and EWOs.

*4.17.1.2. **Terrain Following (TF) Low Level** Accomplish IAW applicable volume(s) of AFSOCI 11-202 procedures. One hour of TF low level is required to credit the event. Credit this event as mountainous if the terrain presents significant terrain avoidance(TA) returns for thirty minutes or more. The pilot, co-pilot, left navigator and right navigator (MC-130E) may credit the same event provided they were occupying their crew station.

*4.17.1.3. **NVG Low Level.** Accomplish IAW applicable volume(s) of AFSOCI 11-202 procedures. Plan and fly a minimum one hour route segment as part of a low level mission to credit this event. The pilot, co-pilot, left navigator and right navigator (MC-130E) may credit the same event provided they were occupying their crew station.

4.17.5. **KU-Band TF.** KU-TF is a procedural event and there is no minimum time required. Entry and exit into KU-TF and one turn at a segmented altitude which is cleared on radar will credit the event.

*4.17.6. **Threat or Coastal Penetration.** Accomplish IAW AFSOCI 11-202 procedures. A threat or coastal penetration may be credited during daylight or night operations (night preferred). Ensure any necessary approval is obtained prior to accomplishing this maneuver. The pilot, co-pilot, left navigator and right navigator (MC-130E) may credit the same event provided they were occupying their crew station.

4.17.7. **Airland Operations.** Pilots and copilots will accomplish this training in their respective crew positions and comply with procedures IAW applicable volume(s) of AFSOCI 11-202.

*4.17.7.1. **Maximum Effort Landings.** These may be credited when accomplished on surfaces that meet the criteria prescribed in applicable volume(s) of AFSOCI 11-202. Landing zones should normally be 3,500 feet or less. Landings may be credited only when the point of touchdown is within the applicable zone. Do not credit go-arounds. Pilots and co-pilots may credit 50% of their max effort landings while conducting NVG operations provided the crew predesignates a 500' landing zone. The remaining 50% must be accomplished using a overt lighting.

*4.17.7.2. **Maximum Effort Takeoffs.** Accomplish takeoffs IAW applicable volume(s) of AFSOCI 11-202. Pilots and co-pilots may dual credit max effort and NVG takeoffs.

*4.17.7.3. **NVG Landing/Takeoff.** Accomplish IAW applicable volume(s) of AFSOCI 11-202. Blacked-out landing zones should be used to the maximum extent possible. Credit all landings in which the aircraft can be stopped at the prebriefed location or can turn off the runway at the planned exit location.

4.17.7.4. **Self-Contained Approaches (SCA):**

4.17.7.4.1. **MC-130E.** SCA will be performed by two navigators using procedures in applicable volume(s) of AFSOCI 11-202. SCA is creditable if the pilot determines a landing could be made from the approach after reaching MDA and prior to the MAP. Both navigators may credit. Pilots will not credit SCAs toward table 4.3 requirements.

*4.17.7.4.2. **MC-130H.** the navigator or EWO will credit this event when a SCA is the primary means of approach and the pilot determines that a landing could be made from the approach after reaching MDA and prior to the MAP. Pilots will not credit SCAs toward table 4.3 requirements. The navigator and EWO will not credit the same SCA.

*4.17.7.5. **Go-Around.** Normally accomplished in conjunction with an NVG SCA in which either an actual or simulated missed approach must be executed. Normally, initiate the go-around after the aircraft has reached the minimum descent altitude and missed approach point.

*4.17.7.6. **Infil/Exfil.** The immediate off/onloading of personnel or equipment on the runway or taxiway. This offload and onload method is normally employed by two loadmasters at night during NVG operations using canary slides as primary/ground loading ramps as secondary. Minimum requirements are to complete the Infil/Exfil checklist while off/onloading personnel or any vehicle certified for rapid Infil/Exfil. At least one event per semiannual period must be accomplished using a four-wheeled vehicle.

*4.17.8. **Airdrop Operations.** Accomplish IAW applicable volume(s) of AFSOCI 11-202. The pilot, co-pilot, left navigator and right navigator (MC-130E)may credit a single airdrop. Credit all airdrops that land within 300 meters of the aim point as successful. An off drop zone drop is not a successful drop and only the loadmaster may receive credit for training... AETC units will comply with AFR 55-40, AFSOC Sup 1, except that all reports will be addressed to HQ AETC/DOFS with informational copies to HQ 19 AF/DOS and HQ AFSOC/DOX.

4.17.8.1. Pilots can credit all actual or SATB airdrops except where noted in tables 4.7 and 4.8. Up to 50 percent of each type drop may be credited by simulated drops (airdrops with a semi-annual requirement of 1 may not be credited by simulated airdrops).

4.17.8.2. Navigators may credit all actual and up to 50 percent of semiannual requirements with SATB drops. Both MC-130E navigators may receive credit for all drops and should alternate seats during continuation training to ensure proficiency in both positions. A CARP or HARP must be computed to credit an airdrop.

4.17.8.3. Loadmasters must fulfill each event by an actual drop. CRRC drops may be credited as CRS, if airdropped using CRS procedures or as CDS if airdropped using CDS procedures. If an unplanned "no drop" is called after completion of the "one minute warning" through no fault of the crew and no racetrack is planned, the drop may be credited as an actual airdrop.

*4.17.9. **Inflight Refueling (IFR).** Crewmembers will accomplish rendezvous, contact (except navigators), and post inflight refueling procedures to receive credit. ARCT criteria is one minute early to on time.. Contact qualified pilots must maintain 10 minutes of contact time with no more than two inadvertent disconnects after initial contact. Contact qualified pilots may credit refueling events from either pilot seat.

*4.17.10. **Helicopter Air Refueling (AR).** Accomplish IAW applicable volume(s) of AFSOCI 11-202 and the appropriate technical orders. Rendezvous must be flown to actual helicopter(s) (except FEs). Aircraft Commanders may credit any type of rendezvous for this event. Navigators must use an electronic aid to direct the aircraft in order to credit this event. Timing criteria is on-time to two minutes late for an ARCT. Flight engineers must complete the Air Refueling checklist to credit the event. Loadmasters must have actual contact by a helicopter to credit this event. Fuel does not have to be transferred after contact to receive credit.

4.17.11. **Electronic Warfare Operations:**

4.17.11.1. **Ground Radar Event.** Engagement with a ground or ship-based SAM/AAA radar site or radar simulator. Multiple events per sortie may be credited if engagements are clearly distinct with respect to time and tactical situation. Each event will include a minimum of 15 minutes activity.

*4.17.11.2. **Airborne Intercept Event.** An event will include at least 15 minutes activity or two separate and distinct engagements by a fighter aircraft with an operable fire control radar. Multiple events per sortie may be credited.

*4.17.11.3. **Expendable Events.** Normally, accomplish these events in conjunction with airborne intercept, ground radar events, or during aircraft defensive maneuvers versus ground based threat simulators. Program and drop chaff or flares to credit an event. Only one event may be credited by each EWO per mission.

4.17.12. **Radar Update (MC-130H).** Each event may be credited when the radar is used to update system position. Update can be en route or terminal.

4.17.13. **IDS Update (MC-130H).** Each event may be credited when the IDS is used to update system position. Update can be en route or terminal.

4.17.14. **Other System Update (MC-130H).** Updates to the system position by any means other than a sensor, i.e., TACAN, flyover, or operator insert. These are not limited to en route updates.

4.17.15. **Terrain Avoidance (TA) (MC-130H).** EWO will assume primary control of TA maneuvers during a TF event. Twenty minutes of TA is required to credit this event.

4.17.16. **Communications Events (MC-130E):**

4.17.16.1. **Secure Voice.** Load the secure voice device IAW the appropriate checklists/instructions. Establish two-way contact in both the clear and secure modes. This may be accomplished to any station, including another member of your formation. Only one KY-58 and one KY-75 event per mission may be logged.

4.17.16.2. **Authentication.** Challenge and reply with a distant station. Only one event per mission may be logged.

4.17.16.3. **Anti-jam.** Set up and operate the radio in anti-jam mode (HAVE QUICK or SINCGARS). Establish contact with a distant station and pass a message in the active anti-jam mode. Only one event per mission may be logged.

4.17.16.4. **Command/Control.** Command/Control comm event may be logged for any mission where an execution checklist or mission brevity codes are utilized for command and control. Maximum of one event per flight may be logged.

4.17.16.5. **Tactical Comm.** Tactical comm event may be logged for any mission where comm is established with a combat control team (CCT), special tactics squad (STS), landing zone controller (LZC), drop zone controller (DZC) or similar ground party during mission events. Maximum of one event per flight may be logged.

*4.17.17. **FARRP.** Accomplish IAW applicable volume(s) of AFSOCI 11-202 and AFSOCR 55-12 using NVGs under covert lighting conditions. Event will include establishing a FARRP site, scheduled fuel transfer, and disestablishment. Pilots and flight engineers may credit this event during day or overt lighting conditions, however night is preferred. Only tanker FARRP events may be credited toward table 4.7 and 4.8 requirements.

*4.17.18 **Formation Sortie. MC-130E**: Complete a fixed-wing rejoin with another MC-130 and fly 15 minutes in the wing position IAW AFSOCI 11-202 to credit this event. Two or more MC-130's are considered in formation when under the command of a designated mission commander or formation commander, operating in close proximity with each aircraft commander assuming responsibility for their aircraft position relative to the others in the same formation. Wingmen must begin the fixed-wing rejoin with at least 1 mile separation and close to spare tanker position. Crew members may dual log applicable requirements accomplished during the course of a formation sortie. Crewmembers who are non-current in this event will not fly formation and will only fly single ship helicopter air refueling. Pilots who are not certified as helicopter refueling aircraft commanders will accomplish this event from the co-pilot's seat (exception: pilots in helicopter air refueling upgrade may credit this event in either seat). **Close Interval Sortie MC-130H**: Fly a rejoin to a formation airdrop (when properly qualified), minimum interval landing, or simultaneous landing (when properly qualified). Two or more MC-130's are considered in formation when under the command of a designated mission commander or formation commander. Wingmen must begin the rejoin with at least 3 miles separation and close to 20 second spacing. Crew members may dual log any requirements accomplished during the course of a formation sortie (i.e., a pilot may credit an NVG landing flown during an NVG minimum interval landing). Crewmembers who are non-current in this event will only fly single-ship mission events.

*4.17.18.1. **Night Formation Sortie.** Fly a formation sortie at night using NVGs.

*4.17.18.2. **Close Interval Airdrop (MC-130H).** Accomplish IAW applicable volume(s) of AFSOCI 11-202 procedures. Simulated and SATB airdrops satisfy this requirement.

*4.17.18.3. **Minimum Interval Landing (MC-130H).** Accomplish IAW applicable volume(s) of AFSOCI 11-202 procedures. Crewmembers on the lead and wing aircraft may credit this event.

*4.17.18.4. **Formation Helicopter Refueling (MC-130E).** Fly rendezvous in formation with another MC-130 to an Option I or Option II helicopter air refueling IAW T.O. 1-1C1-20. When flying as Lead or wingmen during an Option 2 rendezvous, the rendezvous must be flown to actual helicopters to log this event. Wingmen during an Option 1 rendezvous may credit one of the two required semiannual rendezvous using a simulated helicopter. Pilots who are not certified as helicopter refueling aircraft commanders will accomplish this event from the co-pilot's seat (exception: pilots in helicopter air refueling upgrade may credit this event in either seat).

*4.17.18.5. **Weather Penetration/Lost Contact (MC-130E).** If performed on a low level route, conduct inadvertent weather penetration procedure IAW AFSOCI 11-202. Include formation separation and position keeping for a minimum of one leg, a turn over an enroute checkpoint, and a formation rejoin. If performed on the AR track, conduct lost contact procedure IAW T.O. 1-1C1-20. Actual helos are not required to credit this event.

*4.17.18.6. **Simultaneous NVG Landing (MC-130H).** Accomplish IAW applicable volume(s) of AFSOCI 11-202 procedures. Crewmembers on the lead and wing aircraft may credit this event. Pilots and navigators may dual credit with other NVG landing requirements.

***Table 4.1. Ground Training Requirements.**

(FCOs comply with navigator requirements unless noted otherwise)

[AFORMS]	PLT	NAV	EWO	FE	CSO	LM	SO	AG	DSO	FS
ONE TIME REQUIREMENTS:										
1. Basic Survival; AFCAT 36-2223 (Note 1 (AETC), 2,12) [SS01]	X	X	X	X	X	X	X	X	X	
2. Combat Mission Training (Initial); AFSOCI 11-403 (Notes 2,12, 23) [G071]	X	X	X	X	X	X	X	X	X	
3. Crew Resource Management (Initial); AFSOCI 11-403 (Note 3,12) [G231]	X	X	X	X	X	X	X	X	X	
4. DoD High Risk Training; JSSA (level B/ level C) [LS14/LS15]	X	X	X	X	X	X	X	X	X	
5. Ground Egress Training; Academics/Hands On; AFSOCI 11-403 (Note 1) [G021/G020]				X		X				
6. FARRP Phase I; AFSOCI 11-403 (Note 13) [G200]	X	X	X	X	X	X				
7. Night Vision Device Training; AFSOCI 11-403 (Note 18) [VV01]	X	X	X	X	X	X		X		
8. Psychological Ops; AFSOCI 11-403 (Notes 2,21) [G072]	X	X	X	X	X	X			X	
9. Water Survival;AFCAT 36-2223 (Notes 1 (AETC), 2,12) [WW01]	X	X	X	X	X	X	X	X	X	
REQUIRED AFTER PCS										
10. Fire Extinguisher Tng; AFOSH Std 127-56 (Notes 3,12) [G022]	X	X	X	X	X	X	X	X	X	X
11. Marshaling Exam; AFI 11-218 (Notes 3,12) [G002]	X	X	X	X	X	X	X	X	X	
12. Unit/Theater Indoc; AFSOCI 11-403 (Note 3) [G001]	X	X	X	X	X	X	X	X	X	X
REQUIRED EVERY 3 YEARS										
13. Combat Survival Continuation Training; AFSOCI 11-301 (Notes 2,12,15, 24) [LS02]	X	X	X	X	X	X	X	X	X	
14. Physiological Training; AFI 11-403 (Notes 1,12,27) [PP11]	X	X	X	X	X	X	X	X	X	X
15. Water Survival Continuation Training; AFSOCI 11-301 (Notes 2,12) [LS03]	X	X	X	X	X	X	X	X	X	

Table 4.1 (Continued) [AFORMS]	PLT	NAV	EWO	FE	CSO	LM	SO	AG	DSO	FS
REQUIRED EVERY 2 YEARS										
16. Aircraft Anti-Hijack; AFI 13-207 (Note 12) [G090]	X	X	X	X	X	X	X	X	X	X
17. Self Aid Buddy Care; AFI 36-2238 (Note 12) [G941]	X	X	X	X	X	X	X	X	X	
18. Small Arms Training (M-9); AFI 36-2226 (Notes 2, 12) [G280]	X	X	X	X	X	X	X	X	X	X
19. Small Arms Training (M-16); AFI 36-2226 (Notes 2) [G286]				X	X	X		X		
20. Special Operations Planning Exercise; AFSOCI 11-403 (Notes 12,15, 23) [G061]	X	X	X	X	X	X	X	X	X	
REQUIRED ANNUALLY										
21. Aircrew Eye and Respiratory Protection System (AERPS) AFSOCI 11-301 (Notes 2,12,15, 23) [LS04]	X	X	X	X	X	X	X	X	X	X
22. Antiterrorism/Force Protection Training AFI 31-210 (Note 28) [G110]	X	X	X	X	X	X	X	X	X	X
23. Authentication/Ops Codes; AFSOCI 11-403 (Notes 10,14) [G081]	X	X	X		X					
24. CDTQT AFSOCI 11-403 (Note 2, 22, 24) [LS05]	X	X	X	X	X	X	X	X	X	X
25. Combat Mission Training Refresher AFSOCI 11-403 (Notes 2,12,23) [G070]	X	X	X	X	X	X	X	X	X	
26. Crew Resource Management Refresher; AFSOCI 11-403 (Notes 1 (AETC), 3,12) [G230]	X	X	X	X	X	X	X	X	X	
27. CSO Refresher; AFSOCI 11-403 (Notes 3,7) [G221]					X					
28. EWO Refresher; AFSOCI 11-403 (Notes 3,7) [G222]			X							
29. Flight Engineer Systems Refresher; AFSOCI 11-403 (Note 3) [G223]				X						
30. Flight Physical; AFI 41-210 (Notes 1,12) [PP01]	X	X	X	X	X	X	X	X	X	X
31. Ground Chemical Defense Ensemble; AFSOCI 11-301 (Notes 12,20,24,29) [G010]	X	X	X	X	X	X	X	X	X	X

Table 4.1 (Continued) **[AFORMS]**	**PLT**	**NAV**	**EWO**	**FE**	**CSO**	**LM**	**SO**	**AG**	**DSO**	**FS**
REQUIRED ANNUALLY										
32. Ground Egress Training; Academics/ Hands On; AFSOCI 11-403 (Notes 1,12,17) [G021/G020]	**X**	**X**	**X**		**X**		**X**	**X**	**X**	**X**
33. FARRP Refresher; AFSOCI 11-403 (Notes 4,19) [G201]	**X**			**X**		**X**				
34. Instrument Refresher Course; AFI 11-401 (Note 3, 25) [G130]	**X**									
35. Law of Armed Conflict; AFPD 51-4 (Note 12) [G100]	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
36. Life Support Equipment Training; AFSOCI 11-301 (Notes 1 (AETC), 2, 12) [LS06]	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
37. Loadmaster Refresher; AFSOCI 11-403 (Notes 3,) [G224]						**X**				
38. Navigator Refresher; AFSOCI 11-403 (Notes 3,7,10) [G225]		**X**								
39. Pilot/Flight Engineer Simulator Refresher Course; AFSOCI 11-403 (Notes 3,7, 26) [G250]	**X**			**X**						
40. Pyrotechnic Training; AFI 91-402 (Notes 2,6) [G183]						**X**		**X**		
41. Radar Refresher AFSOCI 11-403 (Notes 2,3(AETC), 9, 13, 14) [G226]	**X**	**X**	**X**							
42. Tactical Employment/Threat Open Book Test (Note 2) [G063]	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	
43. Threat Signal Recognition; AFSOCI 11-403 (Notes 2,3(AETC),6,10,11) [G073]	**X**	**X**								
REQUIRED SEMIANNUALLY										
44. ISOPREP; AFI 14-105 (Notes 2,12) [G120]	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
45. Threat Signal Recognition; AFSOCI 11-403 (Note 2, 3 (AETC)) [G073]			**X**							
AS REQUIRED										
46. Buffer Zone Procedures; USAFEI 11-201/PACAFI 11-201 (Notes 10,16) [G075]	**X**	**X**			**X**					

Table 4.1 (Continued) **[AFORMS]**	**PLT**	**NAV**	**EWO**	**FE**	**CSO**	**LM**	**SO**	**AG**	**DSO**	**FS**
AS REQUIRED										
47. IFF/SIF Procedures; NORADR 55-67, 55-68 (Note 16) [G082]	**X**				**X**					
48. Safe Passage/Minimum Risk; NORADR 55-67, theater directives (Notes 10,16) [G062]	**X**	**X**			**X**					
49. SCATANA; AFI 13-201 (Notes 10,16) [G300]	**X**	**X**	**X**		**X**					

NOTES:

1. Grounding item. Crewmember will not fly until current in this item.
*2. Mission Ready item. Non-current/unqualified crewmembers are restricted to training missions (instructor supervision not required) and will not fly on exercise or contingency missions.
3. Training status item. Crewmembers will only fly in training status (under instructor supervision) until completed or current in this item.
4. Designated crews.
5. Applies to MC-130P navigators.
*6. AC-130, EC-130E and MC-130P crewmembers only.
7. Completion of formal school qualification, requalification, aircraft commander, instructor pilot or instructor flight engineer upgrade including C-130 simulator instruction satisfies the annual requirement.
8. CONUS aircrews are exempt.
9. Applies to MC-130H EWOs.
10. Does not apply to AC-130 FCOs.
11. Does not apply to AC-130 navigators.
12. Intel Officers on flying status must complete.
13. MC-130E/H crewmembers only.
14. Does not apply to MC-130E EWOs.
15. Not required for formal school aircrew instructors. If formal school instructors are deployed for contingency or exercise augmentation, these events must be completed prior to deployment.
16. Operations groups will tailor this training to their theater of operations.
*17. Academic [GO21] and hands-on [GO20] training are one-time events for FEs and LMs, however, AETC FEs and LMs will complete the academic portion of the refresher training [G021] annually.
18. Does not apply to AC-130 Nav, FCO, and EWO
*19. Does not apply to crewmembers who are not Hot Refueling qualified.
20. Required within 90 days after PCS, if arriving from a non-mobility status unit.
21. MC-130E/H/P crewmembers only.
22. Required for units equipped with AERPS modified aircraft. Training is accomplished in-flight.
23. Required for AETC aircrews if instructed in the formal school as part of an applicable syllabus of instruction.
24. Not required for AETC aircrews.
25. Applies to AETC navigators and AETC EWOs.
26. Applies to MC-130H/P Navs, EWOs, CSOs, and LM only as courses become available. May be combined with other refresher courses.
27. Physiological training is valid for 48 months for 352 SOG assigned and attached aircrews. For AFI 11-403 purposes, 352 SOG aircrews may be considered USAFE assigned.
*28. Must be completed within six months prior to deployment to OCONUS locations.
*29. Required every two years for AFRC units.

Table 4.2. Prorata Training Requirements

CONSECUTIVE DAYS NOT AVAILABLE DURING TRAINING PERIOD	SEMIANNUAL PERIOD MONTHS REMAINING	QUARTERLY PERIOD MONTHS REMAINING
0-14 Days	6	3
15-45 Days	5	2
46-75 Days	4	1
76-105 Days	3	1
106-135 Days	2	N/A
136 Days-Six Months	1	N/A

MONTHS REMAINING		**NUMBER OF EVENTS REQUIRED FOR SEMIANNUAL CURRENCY**										
SEMI-ANNUAL/		**24**	**18**	**16**	**12**	**10**	**8**	**6**	**4**	**3**	**2**	**1**
QUARTERLY		**REMAINING REQUIREMENTS FOR SEMIANNUAL/QUARTERLY PERIOD**										
6	**3**	**24**	**18**	**16**	**12**	**10**	**8**	**6**	**4**	**3**	**2**	**1**
5	**-**	**20**	**15**	**13**	**10**	**8**	**7**	**5**	**3**	**2**	**2**	**1**
4	**2**	**16**	**12**	**11**	**8**	**7**	**5**	**4**	**3**	**2**	**1**	**1**
3	**-**	**12**	**9**	**8**	**6**	**5**	**4**	**3**	**2**	**2**	**1**	**1**
2	**1**	**8**	**6**	**5**	**4**	**3**	**3**	**2**	**1**	**1**	**1**	**1**
1	**-**	**ONE (1) AIRCREW PROFICIENCY SORTIE REQUIRED**										

***Table 4.3. Semiannual Basic Qualification Flying Training Requirements.**

REQUIREMENT	[AFORMS]	P	N	Other
Aircrew Proficiency Sortie (Notes 1,2,4,10)	[B010]	**12**	**12**	**6**
Local Proficiency Sortie	[B020]	**1**		
C-130 Sortie (Note 9)	[B481]	**2**		**2**
Pilot Proficiency Events				
Total Takeoffs (Notes 1,3)	[B030]	**18**		
Night Takeoffs	[B050]	**4**		
Holding Patterns (Note 2)	[B060]	**2**		
Instrument Approaches (Notes 1,2)	[B070]	**24**		
Precision Approaches	[B080]	**12**		
Nonprecision Approaches	[B100]	**12**		
NDB Approaches (Note 8)	[B112]	**1**		
Circling Maneuver	[B115]	**1**		
Missed Approaches (Note 2)	[B110]	**2**		
Total Landings (Notes 1,3)	[B150]	**18**		
Night Landings	[B170]	**4**		
Navigator Proficiency Events				
Total Navigation Profiles (Note 2,5,7)	[B014]		**2**	
Day Nav Profile (Note 8)	[B012]		**1**	
Night Nav Profile (Note 8)	[B013]		**1**	
Basic Nav Profile (Note 6)	[B015]		**1**	
Integrated Navigation Profile (Note 6)	[B016]		**1**	
Night Celestial Fix (Note 6)	[B350]		**3**	

NOTES:

*****1. Pilots must accomplish a takeoff, approach, and landing every calendar month. All other aircrew members must accomplish at least one of these events in the primary aircrew position every 60 days. Failure to do them results in loss of aircraft currency.

*2.Fifty percent of these events may be credited in an Aircrew Training Device.

3. Instructors/Flight Examiners may not credit student/examinee events.

4. Flight Surgeons require 1 night sortie per semiannual period.

*5. Units whose primary aircraft are equipped with dual INS or SCNS/INS and GPS do not have to accomplish navigation profiles. 193 SOW does accomplish navigation profiles.

6. Applies only to the 193 SOW

7. Does not apply to the 193 SOW.

8. May be accomplished in a Aircrew Training Device.

*9. Applies to C-130E qualified crewmembers only. See paras 4.4.1 and 4.5.2 for further guidance.

*10. Dual qualified nav/FCOs will accomplish 50% of Aircrew Proficiency Sorties from each seat. 60 day currency may be updated from either seat.

Table 4.4. AC-130H Semiannual Mission Ready Flying Requirements.

REQUIREMENT [AFORMS]	AC	CP	NAV	FCO	FE	EWO	SO	AG	LM	DSO
CORE MISSION EVENTS										
Combat Mission Profile (Notes 8,10) [CT03]	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Live Fire (Notes 1,4,8,10,12) [JA07]	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	
Dry Fire (Notes 3, 4,10) [JA06]	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	
Offset Live Fire (Notes 5,7,11) [JA12]	**2**			**2**		**4**	**2**			
Total Inflight Refueling (IFR) (Notes 6,9) [AR22]			**2**		**2**					
Ground Radar (Note 11) [EW02]						**1**				
Expendable (Note11) [EW04]						**1**				
SPECIAL MISSION EVENTS										
Total Inflight Refueling (IFR) (Notes 1,2,9) [AR22]	**4**	**4**								
Night IFR [AR23]	**2**	**2**								
Night Low Level (Notes 3,4,11) [TF02]	**4**	**4**	**4**	**4**						

NOTES:
1. Pilots require one each 90 days (day or night).
2. Pilot instructors and examiners may not credit student or examinee accomplishments.
3. Time between events will not exceed 60 days except for FE, AG, and LM.
*4. Dual qualified NAV/FCOs and sensor operators will complete 50 percent from each seat.
5. Dual qualified NAV/FCOs will complete from the FCO seat.
6. Dual qualified NAV/FCOs will complete from the NAV seat.
7. Beacon Offset may be accomplished live or dry for the EWO.
8. Only one event can be logged per crewmember, per sortie.
9. Non-currency in any event in this subarea results in loss of currency for this subarea only.
10. Non-currency in any event in this subarea results in loss of mission currency.
11. Non-currency in any event in this subarea results in loss of currency in only that event.
12. One event must be accomplished every 60 days for FCOs

***Table 4.5. AC-130U Semiannual Mission Ready Flying Requirements.**

REQUIREMENT [AFORMS]	AC	CP	NAV	FCO	FE	EWO	SO	AG	LM	DSO
CORE MISSION EVENTS										
Combat Mission Profile (Notes 7,9) [CT03]	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Live Fire (Notes 1,4,7,9,11) [JA07]	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	
Dry Fire (Notes 3,4,9) [JA06]	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	
Offset Live Fire (Notes 4, 10) [JA12]	**2**		**2**	**2**			**2**			
Dual Attack Target (Note 4,10) [DT01]	**2**		**6**							
Radar Profile (Note 10) [RP01]			**6**							
Total Inflight Refueling (IFR) (Notes 6,8) [AR22]			**2**		**2**					
Ground Radar (Note 10) [EW02]						**1**				
Expendable (Note 10) [EW04]						**1**				
SPECIAL MISSION EVENTS										
Total Inflight Refueling (IFR) (Notes 1,2,8) [AR22]	**4**	**4**								
Night IFR [AR23]	**2**	**2**								
Dual Target Attack (Note 4,10) [DT01]				**6**						
Night Low Level (Notes 3,4,10) [TF02]	**4**	**4**	**4**	**4**						

NOTES:

1. Pilots require one each 90 days (day or night).
2. Pilot instructors and examiners may not credit student or examinee accomplishments.
3. Time between events will not exceed 60 days except for FE, AG, and LM.
*4. Dual qualified NAV/FCOs and sensor operators will complete 50 percent from each seat.
5. Dual qualified NAV/FCOs will complete from the FCO seat.
6. Dual qualified NAV/FCOs will complete from the NAV seat.
7. Only one event can be logged per crewmember per sortie.
8. Non-currency in any event in this subarea results in loss of currency for this subarea only.
9. Non-currency in any event in this subarea results in loss of mission currency.
10. Non-currency in any event in this subarea results in loss of currency in only that event.
11. One event must be accomplished every 60 days for FCOs.

***Table 4.6. MC-130P Semiannual/Quarterly Mission Ready Flying Requirements.**

REQUIREMENT		AC	CP	NAV	FE	CSO	LM	DSO
CORE MISSION EVENTS								
Combat Mission Profile (Notes 1,4,10)	[CT03]	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Helo Air Refueling (Notes 1,10)	[AR20]	**4**	**2**	**4**	**4**		**2**	
Night Helo AR (Note 2)	[AR21]	**2**	**2**	**2**	**2**		**1**	
Airland Operations (Notes 7,9)								
Total Max Effort Takeoffs	[ME01]	**10/2**	**6**					
Night	[ME02]	**6/2**	**4**					
Total Max Effort Landings	[ME03]	**10/2**	**6**					
Night	[ME04]	**6/2**	**4**					
Formation Sorties (Note 14)	[F100]	**3**	**3**	**2**				
Night Formation Sorties	[F102]	**2**	**2**					
Formation Helicopter Refueling (Note 8)	[F106]	**2**	**2**					
Weather Penetration/Lost Contact (Note 14)	[F104]	**2**	**2**	**2**				
Total Airdrop (Notes 9,12)	[AD01]	**4**	**4**	**4**			**4**	
Actual	[AD06]	**2**	**2**	**2**				
Personnel	[AD03]						**1**	
CDS (Note 6)	[AD04]	**1**	**1**				**2**	
Night	[AD13]	**2**	**2**	**2**				
Electronic Warfare Events (Note 9)								
Expendable (Note 1)	[EW04]			**1**				
Ground Radar	[EW02]			**1**				
Communication Events (Notes 1,10)								
Authentication	[CS05]					**4**		
Secure Voice	[CS08]					**4**		
Anti-jam	[CS11]					**4**		

REQUIREMENT (Table 4.6 Continued)		AC	CP	NAV	FE	CSO	LM	DSO
ATC Comm	[CS12]					**3**		
Command/Control Comm	[CS13]					**4**		
Tactical Comm	[CS14]					**4**		
NVG Scanner	[CS15]					**3**		
SPECIAL MISSION EVENTS								
NVG Airland (Notes 3,7,9)								
Takeoff	[NV01]	**6**						
Landing (Notes 4, 13)	[NV05]	**6**			**2**			
Self Contained Approach	[NV02]	**2**	**4**	**6**				
Go Around	[NV03]	**1**	**1**	**1**				
Infil/Exfil (Note 8)	[NV04]						**2**	
Formation Downwind Recovery	[F105]	**2**						
Formation Overhead Recovery	[F107]	**2**						
High Altitude Airdrop (Note 8)	[AD05]			**1**				
Total Inflight Refueling (Notes 5,7,9)	[AR22]	**4**		**2**	**2**			
Night IFR	[AR23]	**2**						

NOTES:

1. Fifty percent of these events may be accomplished in the Weapon System Trainer (WST) or Satellite Navigational System (SNS). The Expendable event may be logged at annual WST refresher training.
2. Accomplish using min-comm-procedures.
*3. Pilots will accomplish these events in their respective NVG crew positions. NVG landing qualified pilots will accomplish 100 percent of the landing requirements and a minimum of two SCAs.
*4. Time between events for pilots, copilots, and navigators will not exceed 60 days. AETC instructors may update 60 day currency by instructing this event (exception: NVG Landings).
5. Pilots require one event each 90 days.
6. CRRC and RAMZ drops may be credited as CDS if dropped using CDS procedures.
7. Pilot instructors and examiners may not credit student or examinee accomplishments.
8. Non-currency in any event in this subarea results in loss of currency in only that event.
9. Non-currency in any event in this subarea results in loss of currency for only this subarea.
10. Non-currency in any event in this subarea results in loss of mission currency.
*11. Deleted.
12. May credit fifty percent of these events by SATB drops. Exception: Loadmasters comply with stated requirements.
*13. NVG Landings can dual credit Total Max Effort Landings (night) if flown to a 500' zone on a marked runway. Do not dual credit landings to unmarked "blacked-out" runways. NVG takeoffs flown using max effort procedures may be credited toward Total Max Effort Takeoffs (night).
*14. Non-currency in any event in this subarea results in loss of formation currency.

***Table 4.7. MC-130E Semiannual/Quarterly Mission Ready Flying Requirements.**

REQUIREMENT [AFORMS]		AC	CP	NAV	EWO	FE	CSO	LM	DSO
CORE MISSION EVENTS		S/Q							
Combat Mission Profile (Notes 5,11)	[CT03]	**8**	**8**	**8**	**8**	**3**	**3**	**3**	**3**
Night Mountain TF (Notes 7,11)	[TF03]	**3**	**3**	**3**		**2**			
NVG Low Level (Note 11)	[LL01]	**3**	**3**	**3**		**1**			
Threat or Coastal Penetration (Note 11)	[LL02]	**1**	**1**	**1**					
Airland Operations (Notes 4,16)									
Total Max Effort Takeoffs (Note 10)	[ME01]	**6**	**4**						
Night	[ME02]	**4/2**	**2**						
Total Max Effort Landings (Note 10)	[ME03]	**6**	**4**						
Night	[ME04]	**4/2**	**2**						
Self Contained App(Notes 3, 5,10,12)	[NV02]	**6**	**6**	**6**					
Go-Around (Note 12)	[NV03]	**2**	**2**	**2**					
Infil/Exfil (Note 9)	[NV04]							**2**	
Total Airdrops (Note 9)	[AD01]	**6**	**6**	**12**				**6**	
Personnel (Note 15)	[AD03]	**2**	**2**	**2**				**1**	
High-Speed	[AD07]	**1**	**1**	**2**				**1**	
Heavy Equipment (Note 8)	[AD12]	**1**	**1**					**2**	
CRS (Notes 2,6)	[AD10]	**2**	**2**					**1**	
CDS (Notes 2,6)	[AD04]	**2**	**2**					**1**	
Visual CARP (Note 13)	[AD08]	**1**	**1**	**2**					
NVG CARP	[AD02]			**1**					
Electronic Warfare Events									
Ground Radar (Note 11)	[EW02]				**4**				
Airborne Intercept (Note 9)	[EW03]				**3**				
Expendable (Note 9)	[EW04]				**1**				

Table 4.7 Continued. REQUIREMENT	**AC**	**CP**	**NAV**	**EWO**	**FE**	**CSO**	**LM**	**DS0**
Comm Events (Note 11)								
Authentication [CS05]						**4**		
Secure Voice [CS08]						**4**		
Anti-jam [CS11]						**4**		
Command/Control Comm [CS13]						**4**		
Tactical Comm [CS14]						**4**		
SPECIAL MISSION EVENTS								
Total Inflight Refueling (Notes 1,4,10) [AR22]	**4**	**1**	**2**		**2**			
Night IFR [AR23]	**2**				**1**			
Helo Air Refueling (Note 10) [AR20]	**4**	**1**	**4**		**4**		**2**	
Night Helo AR [AR21]	**2**				**2**		**1**	
Formation Sorties (Note 17) [F100]	**3**	**3**	**2**					
Night Formation Sorties [F102]	**2**	**2**						
Formation Helicopter Refueling (Note 9) [F106]	**2**	**2**						
Weather Penetration/Lost Contact (Note 17) [F104]	**2**	**2**	**2**					
NVG Airland Operations (Notes 3,4,10,16)								
Takeoff [NV01]	**6**							
Landing (Note 5) [NV05]	**6**				**3**			
Go-Around [NV03]	**2**	**2**						
FARRP (Notes 9,14) [AR24]	**1**				**1**		**1**	
High Altitude Airdrop (Note 9) [AD05]			**1**					

NOTES:

1. Time period between events will not exceed 90 days for qualified contact pilots.
2. Pilots and copilots need only accomplish one CRS or CDS.
*3. NVG landing qualified pilots will accomplish 100% of the landing requirements and a minimum of two SCAs. SCAs will not be credited toward table 4.3 requirements.
4. Pilot instructors and examiners may not credit student and examinee events.
*5. Do not exceed 60 days between events. Currency for Combat Mission Profile applies to AC, CP, N, EWO only. 60 day currency for SCA does not apply to NVG landing qualified pilots.
6. CRRC may be credited as CDS if airdropped using CDS procedures or as CRS if using CRS procedures.
7. A TF route flown in daylight IMC may be credited toward a night TF event.
8. Accomplish one actual drop using the A/A 37A-11 towplate (if operational). If towplate is not operational, pilots will accomplish one actual heavy equipment airdrop (non-towplate) and loadmasters will accomplish two actual heavy equipment airdrops (non-towplate).
9. Non-currency in any event in this subarea results in loss of currency in only that event.
10. Non-currency in any event in this subarea results in loss of currency for only this subarea.
11. Non-currency in any event in this subarea results in loss of mission currency.

12. Normally, pilots should accomplish this event during NVG Operations or IMC (ensure proper approval). However, pilots who are not certified to fly NVG SCAs may credit this event using non-NVG procedures.
13. Only the pilot or navigator calling the drop may credit this event.
14. Annual requirement for qualified aircraft commanders and flight engineers; do not exceed 12 calendar months between FARRP events.
15. AC, CP, NAV, and LM must complete one actual personnel airdrop.
*16. Takeoff and landings may be credited toward basic takeoff and landing requirements and currency.
*17. Non-currency in any event in this subarea results in loss of formation currency.

***Table 4.8. MC-130H Semiannual/Quarterly Mission Ready Flying Requirements.**

REQUIREMENT [AFORMS]		AC	CP	NAV	EWO	FE	LM	DSO
CORE MISSION EVENTS								
Combat Mission Profile(Notes 5, 11,17)	[CT03]	**10**	**10**	**10**	**10**	**3**	**6**	**6**
Night Mountain TF (Notes 7,11)	[TF03]	**3**	**3**	**3**	**3**	**2**		
NVG Low Level (Note 11)	[LL01]	**3**	**3**	**3**	**3**	**1**		
KU-Band TF (Note 10)	[TF04]	**1**	**1**	**1**	**1**			
Threat or Coastal Penetration (Note 11)	[LL02]	**1**	**1**	**1**	**1**			
Airland Operations (Notes 4,15)								
Total Max Effort Takeoffs (Note 10)	[ME01]	**6**	**4**					
Night	[ME02]	**4/2**	**2**					
Total Max Effort Landings (Note 10)	[ME03]	**6**	**4**					
Night	[ME04]	**4/2**	**2**					
Self Contained App (Notes 3, 5,10,12)	[NV02]	**2**	**6**	**6**	**2**			
Go-Around (Note 12)	[NV03]	**2**	**2**	**2**	**1**			
Infil/Exfil (Note 9)	[NV04]						**2**	
Total Airdrops (Note 9)	[AD01]	**8**	**8**	**12**			**8**	
Personnel (Note 16)	[AD03]	**2**	**2**	**2**			**1**	
High-Speed	[AD07]	**1**	**1**	**2**			**1**	
Heavy Equipment (Note 8)	[AD12]	**1**	**1**				**2**	
CRS (Notes 2,6)	[AD10]	**2**	**2**				**1**	
CDS (Notes 2,6)	[AD04]	**2**	**2**				**1**	
Visual CARP (Note 13)	[AD08]	**1**	**1**	**3**				
NVG CARP	[AD02]			**1**				

Table 4.8 Continued REQUIREMENT		**AC**	**CP**	**NAV**	**EWO**	**FE**	**LM**	**DSO**
Electronic Warfare Events								
Ground Radar (Note 11)	[EW02]				**4**			
Airborne Intercept (Note 9)	[EW03]				**3**			
Expendable (Note 9)	[EW04]				**1**			
Radar Update (Note 9)	[EW05]				**6**			
IDS Update (Note 9)	[EW06]				**6**			
Other System Update (Note 9)	[EW07]				**3**			
TA Event (Note 11)	[EW08]				**4**			
SPECIAL MISSION EVENTS								
Total Inflight Refueling (Notes 1,4,10)	[AR22]	**4**	**1**	**2**		**2**		
Night IFR	[AR23]	**2**				**1**		
NVG Airland Operations (Notes 3,4,10,15)								
Takeoff	[NV01]	**6**						
Landing (Note 5)	[NV05]	**6**				**3**		
Close Interval Sortie (Note 18)	[FO01]	**1**	**1**	**1**				
Close Interval Airdrop (Note 9)	[FO02]	**1**	**1**	**1**				
Minimum Interval Landing (Note 9)	[FO03]	**2**	**1**	**2**				
Simultaneous NVG Landing (Note 9)	[FO04]	**2**	**1**	**2**				
FARRP (Note 9,14)	[AR24]	**1**				**1**	**1**	
High Altitude Airdrop (Note 9)	[AD05]			**1**				

NOTES:

1. Time period between events will not exceed 90 days for qualified contact pilots.
2. Pilots and copilots need only accomplish one CRS or CDS.
*3. Pilots will accomplish these events in their respective NVG crew positions.
4. Pilot instructors and examiners may not credit student and examinee events.
*5. Do not exceed 60 days between events. Currency, for Combat Mission Profile applies to AC, CP, N, EWO only. 60 day currency for SCA does not apply to EWOs and NVG landing qualified pilots.
6. CRRC may be credited as CDS if airdropped using CDS procedures or as CRS if using CRS procedures.
7. A TF route flown in daylight IMC may be credited toward a night TF event.
8. Accomplish one actual drop using the A/A 37A-11 towplate (if operational). If towplate is not operational, pilots will accomplish one actual heavy equipment airdrop (non-towplate) and loadmasters will accomplish two actual heavy equipment airdrops (non-towplate). AETC pilots may credit SATB airdrops for actual airdrops.
9. Non-currency in any event in this subarea results in loss of currency in only that event.
10. Non-currency in any event in this subarea results in loss of currency for only this subarea.
11. Non-currency in any event in this subarea results in loss of mission currency.
12. Normally, pilots should accomplish this event during NVG operations or IMC (ensure proper approval).
13. Only the pilot or navigator calling the drop may credit this event.

14. Annual requirement for qualified aircraft commanders and flight engineers; do not exceed 12 months between Hot Refueling/FARRP events.
*15. Takeoff and landings may be credited toward basic total takeoff and landing requirements and currency.
16. AC, CP, NAV, LM must complete one actual personnel airdrop. Not applicable to AETC pilots and navigators.
17. Intel Officers on flying status must complete this event (6 per semi-annual period).
*18. Non-currency in this event results in loss of close interval formation currency (including close interval airdrop, min interval landing, and simultaneous landing).

***Table 4.9. EC-130E Semiannual/Quarterly Mission Ready Flying Requirements.**

REQUIREMENT [AFORMS]	AC	CP	N	FE	LM	MCC	ECS 3	ECS 2	ECS 1
CORE MISSION EVENTS									
Mission Profile (Notes 1,2) [S460]	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**
Trailing Wire Position									
Program Check [A01R]							**2**	**2**	**2**
HTWASystemCheck [A05R]							**2**	**2**	**2**
VTWA System Check [A10R]							**2**	**2**	**2**
Amplifier Check [A15R]							**2**	**2**	**2**
System Check [A20R]							**2**	**2**	**2**
Event Operation [A25R]							**2**	**2**	**2**
Narrow Band Position									
Program Check [A30R]							**2**	**2**	**2**
Antenna System Check [A35R]							**2**	**2**	**2**
Amplifier Check [A40R]							**2**	**2**	**2**
Systems Check [A45R]							**2**	**2**	**2**
Event Operation [A50R]							**2**	**2**	**2**
Wide Band-1 Position									
Program Check [A55R]								**2**	**2**
Antenna System Check [A60R]								**2**	**2**
Amplifier Check [A65R]								**2**	**2**
Systems Check [A70R]								**2**	**2**
Wide Band-2 Position									
Program Check [A75R]								**2**	**2**
Event Operation [A80R]								**2**	**2**
Program Technician Position									
Program Check [A85R]									**2**
Event Operation [A90R]									**2**
Mission Planning [E01R]						**6**			
Pre/Post Flight [E05R]						**6**			
TW/NB/WB Dir.Msn [E10R]						**6**			

Table 4.9 Continued SPECIAL MISSION EVENTS	**AC**	**CP**	**N**	**FE**	**LM**	**MCC**	**ECS 3**	**ECS 2**	**ECS 1**
Total Inflight Refueling (Notes 3,4) [AR22]	**4**		**2**	**2**					
Night [AR23]	**2**								

NOTES:

1. Time period between events will not exceed 60 days.
2. Flight crewmembers lose mission currency if less than two are accomplished in VOLANT SOLO II aircraft. Currency is regained by flying one sortie in a VOLANT SOLO II aircraft under the supervision of an instructor.
3. Pilot instructors and examiners may not credit student and examinee accomplishment.

*4. Time period between events will not exceed 90 days for Pilots

Table 4.10. Basic Recurrency and Requalification Requirements.

1. Non-current less than 2 months: Show proficiency in deficient items to an instructor. In addition, pilots will perform a takeoff, approach, and landing.
2. Non-current 2-6 months (unqualified): Complete flight evaluation that includes at least all deficient items.
3. Non-current 6-24 months (unqualified): Qualification training as directed by unit commander, must include the following: Pilots require simulator refresher or refresher academics, written instrument exam, qualification exam, instrument and requalification flight evaluations. Other crewmembers will complete qualification exam, applicable refresher course, and a requalification flight evaluation.
4. Non-current 24-60 months (unqualified): Crewmembers must complete requalification requirements IAW chapter 2. Requalification may be accomplished in-unit without a waiver for formal school attendance.
5. Non-current over 60 months (unqualified): Crewmembers must complete initial qualification requirements IAW chapter 2.

***Table 4.11. Core Mission Recurrency and Requalification Requirements.**

1. Non-current less than 2 months: Show proficiency in deficient items to an instructor.
2. Non-current 2-6 months (mission unqualified): If the deficient event is required to be evaluated on the Initial Mission Evaluation per current directives, complete flight evaluation that includes at least all deficient items. If the deficient event is an instructor certified event (see definition of Core Mission Event), requalification may be gained through instructor certification of the deficient event.
3. Non-current 6-24 months (mission unqualified): Mission qualification training as directed by unit commander, must include the following: completion of a written mission qualification exam and mission requalification flight evaluation.
4. Non-current 24-60 months (mission unqualified): Crewmembers must complete mission requalification requirements IAW chapter 3. Requalification may be accomplished in-unit without a waiver for formal school attendance.
5. Non-current over 60 months (mission unqualified): Crewmembers must complete initial mission qualification requirements IAW chapter 3.

***Table 4.11.1. Special Mission Recurrency and Requalification Requirements.**

1. Non-current less than 2 months: Show proficiency in deficient items to an instructor.
2. Non-current greater than 2 months (unqualified in that special mission): Complete flight evaluation or instructor certification IAW Table 5.1.

***Table 4.12. Combat Mission Training Proficiency Matrix.**

TASK	AC	CP	NAV	EWO	FCO	FE	LM	CSO	GUN	SEN	DSO
Command and Control Structure	**B**	**B**	**B**	**B**	**B**	**A**	**A**	**B**	**A**	**A**	**B**
Air Tasking Order (ATO)	**C**	**B**	**C**	**B**	**B**	**A**	**A**	**A**	**A**	**A**	**A**
Employment Concepts and General Orders of Battle	**B**	**B**	**B**	**C**	**B**	**B**	**B**	**B**	**B**	**B**	**B**
Manuals and Publications	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**
Support	**B**	**B**	**B**	**B**	**B**	**A**	**A**	**A**	**A**	**A**	**A**
Weather	**C**	**C**	**C**	**C**	**C**	**A**	**A**	**A**	**A**	**B**	**A**
Intelligence	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**C**
Safe Passage, Authentication, and Ops Codes	**C**	**C**	**C**	**C**	**C**	**A**	**A**	**C**	**A**	**A**	**A**
OPSEC/COMSEC	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
Countering/Threats:											
Employment Doctrine	**B**	**B**	**B**	**C**	**B**	**A**	**A**	**A**	**A**	**A**	**C**
Guidance Systems	**B**	**B**	**B**	**C**	**B**	**A**	**A**	**A**	**A**	**A**	**A**
Capabilities	**C**	**B**	**B**	**C**	**B**	**A**	**A**	**A**	**A**	**A**	**C**
Planning Considerations	**C**	**C**	**C**	**C**	**C**	**A**	**A**	**A**	**A**	**A**	**C**
Electronic Indications (when applicable)	**C**	**C**	**C**	**C**	**B**	**A**	**A**	**A**	**A**	**A**	**A**
Visual Recognition	**C**	**C**	**B**	**C**	**B**	**C**	**C**	**B**	**C**	**B**	**A**
Defensive Maneuvers/Countermeasures	**C**	**C**	**C**	**C**	**B**	**C**	**C**	**B**	**C**	**A**	**A**
Route Selection and Navigation	**C**	**C**	**C**	**C**	**B**	**A**	**A**	**A**	**A**	**B**	**B**
Low Level Considerations	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
Operation/Employment of Defensive Equipment	**C**	**C**	**C**	**C**	**B**	**B**	**C**	**B**	**B**	**B**	**B**
Emissions Control	**C**	**C**	**C**	**C**	**C**	**C**	**B**	**C**	**B**	**B**	**B**
Aircraft Structural and Configuration Limitations	**C**	**C**	**B**	**B**	**B**	**C**	**C**	**A**	**A**	**A**	**A**
Briefings	**C**	**C**	**C**	**C**	**C**	**B**	**B**	**B**	**B**	**B**	**B**
SOFPARS	**B**	**B**	**C**	**C**	**B**	**A**	**A**	**A**	**A**	**A**	**A**
Inflight Reports	**C**	**B**	**B**	**B**	**B**	**A**	**A**	**C**	**A**	**B**	**B**
Judge Advocate	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**

KNOWLEDGE LEVEL DEFINITIONS

A - Introduction to facts/nomenclature

B - Familiarization with principles and procedure. Can explain relationship of basic facts and state general principles about the subject.

C - Comprehension of analysis/operating principles. Can analyze facts and principles and draw conclusions about the subjects.

Chapter 5

UPGRADE/SPECIALIZED TRAINING

Section A - General

5.1. Scope. This chapter identifies the prerequisites and training requirements for qualified aircrew members upgrading to additional levels of qualification.

***5.2. Time Period for Qualification.** The maximum upgrade training period for in-unit aircraft commander, instructor upgrade, and special mission training is four months (8 months for ANG and 12 months for AFRC), from the date of the first ground training session or first flight (whichever occurs first). Individuals unable to complete upgrade training within these limits may continue training; however, their units will notify HQ AFSOC/DOT (AFRC units through channels to HQ AFRC/DOT and ANG units through ANGRC/DOT), with a description of the reason for delay and expected completion date. AETC units will forward this information to HQ AETC/DOFS with informational copies to HQ 19 AF/DOS and HQ AFSOC/DOT.

Section B - Aircraft Commander Upgrade

5.3. General. The prerequisite flying time levels for upgrade are based on the copilot having gained the knowledge and judgment required to effectively accomplish the unit's mission. Unit commanders must ensure their continuation training programs emphasize these areas for their copilots. Flying experience should include left seat time prior to entering formal school upgrade training. Aircraft commander candidates must have acquired an in-depth knowledge of systems, procedures, and instructions prior to entry into the upgrade program. Normally, copilots selected for upgrade should be experienced enough to upgrade from mission ready copilot directly to mission ready aircraft commander. The upgrade program is primarily designed to teach aircraft commander duties, responsibilities, and provides left seat qualification.

5.4. Prerequisites:

5.4.1. If commanders select mission ready copilots to upgrade to basic qualification aircraft commander on an interim basis, the individual will maintain mission ready status as a copilot for SORTS purposes until qualified as a mission ready aircraft commander. Flying hour prerequisites prior to beginning upgrade to aircraft commander are as follows:

TOTAL HOURS	C-130 HOURS*
1,900 or more	200
1,600-1899	300
1,300-1,599	400
1,000-1,299	800
* For MC-130 upgrade: C-130 hours include any type C-130 aircraft with a designated low-level mission. For AC/EC-130 upgrades: C-130 hours include any type C-130 aircraft hours.	

5.4.2. Copilots must have completed the Aircraft Commander Preparatory Course prior to formal aircraft commander upgrade training. This in-unit training consists of academic and flight training. The courseware should be maintained at each group training office.

5.5. Ground and Flight Training Requirements:

5.5.1. The primary method of aircraft commander upgrade is satisfactory completion of the appropriate formal course. ARC units may accomplish upgrade in-unit without a waiver. For approved in-unit upgrades, request courseware IAW paragraph 1.7.

5.5.2. Copilots upgrading to mission AC must have completed basic qualification training and evaluation prior to beginning mission qualification flying training(*Exception:* AETC formal school training is conducted IAW the appropriate syllabus of instruction). Copilots may be upgraded and certified to basic proficiency only aircraft commanders prior to completion of final mission qualification.

Section C - Instructor/Flight Examiner Upgrade

5.6. Aircrew Instructor Program. A sound and practical aircrew instructor program is a prerequisite for effective training, standardization, and aircraft accident prevention. The aircrew instructor program includes individuals required to perform duties as an instructor for any aircrew position. Individuals designated for instructor duty are authorized to instruct at all levels of qualification.

5.6.1. Select instructors based on their background, experience, maturity, and ability to instruct.

5.6.2. Units are authorized the number of instructors IAW their Unit Manning Document(UMD). This number of instructors may be exceeded by commanders to meet unique circumstances and should be controlled.

5.7. Instructor Qualifications. Unit commanders will personally review each instructor candidate's qualifications to ensure the individual possesses the following minimum prerequisites:

5.7.1. **Instructional Ability.** An instructor is a teacher and must understand the principles of instruction as outlined in the instructor upgrade courseware.

5.7.2**. Judgment.** Instructors must possess judgment necessary to meet unexpected or induced emergencies and the ability to exercise sound judgment through mature realization of their own, their student's, and the aircraft's limitations.

5.7.3. **Personal Qualities.** The instructor must have patience, tact, understanding, and the desire to instruct others. Instructors must have a personality which inspires and wins respect of each student.

5.7.4. **Technical Knowledge.** The instructor must be thoroughly familiar with respective aircraft systems and equipment, normal and emergency operating procedures, and for pilots and flight engineers, the prohibited maneuvers and aircraft performance under all conditions of flight. Additionally, all instructors must be thoroughly familiar with the applicable portions of USAF and AFSOC flight management, flying training, and flying operations publications.

5.7.5. **Flying Experience.** Instructors must possess reasonable flying experience to include desired standards of skill and proficiency in both the aircraft and assigned missions. Flying hours alone cannot be accepted as criteria for selection to instructor.

5.7.6. **Tactical Experience.** The instructor must be familiar with respective aircraft defensive systems and equipment. They must be familiar with how their MDS can be employed in threat areas. They must be familiar with AFSOCMAN 11-1 applicable volumes.

5.8. Instructor Responsibilities:

5.8.1. **General.** Instructors will be thoroughly familiar with all courseware and contents of the applicable attachments to this instruction for qualification, upgrade, and specialized training they are required to administer.

5.8.1.1. Instructors will review the student's training records, to include records of counseling and other evaluations or progress indicators, prior to performing each training flight or session.

5.8.1.2. Instructors are responsible for a thorough preflight briefing and critique; they will comply with requirements of mission outlines, as appropriate, for the type mission being flown.

5.8.1.3 Instructors must ensure all required upgrade training items are completed and signed off and that the required level of proficiency has been demonstrated before recommending the student for an evaluation or certifying that the student is qualified.

5.8.2. **Instructor Pilots.** Instructor pilots are responsible at all times for the conduct of the flight and safety of the aircraft. If at any time during the flight the judgment or proficiency of the student at the controls raises a question in the instructor's mind as to the student's ability to safely complete a prescribed maneuver, the instructor will immediately take over the controls of the aircraft. The instructor should then explain and demonstrate proper methods of conducting the maneuver prior to the student resuming control of the aircraft. All instructors will place special emphasis on the procedures for positive identification of emergency conditions before initiating corrective action. In addition, instructors will place a high emphasis on the procedures for positive exchange of control; these procedures will be thoroughly briefed.

5.8.3. **Instructor Aircrew Members (Other Than Pilots).** Each instructor aircrew member is responsible for the safe execution of the duties of their respective crew position. At any time during the flight, if the judgment or proficiency of the student should raise a question in the instructor's mind as to the student's ability to safely execute the duties of the aircrew position, the instructor will immediately take over these duties. The instructor should then explain and demonstrate the proper method of executing these duties.

5.8.4**. Instructor Deficiencies.** Instructors who demonstrate deficiencies in their ability to instruct may be used in their primary crew position (provided the deficiency does not involve primary crew duties). Commanders will take the necessary action to either retrain or remove those individuals from instructor status IAW Air Force, AFSOC, and/or AETC directives.

5.9. Instructor Upgrade Prerequisites:

5.9.1. **General.** Instructors in basic qualification status may keep basic qualification instructor status during mission qualification training. However, before they can instruct in mission events, they must finish mission qualification training and satisfactorily complete an instructor flight evaluation on a tactical mission. Total flying hour requirements as posted in flying tables for pilots and flight engineers are flying hours in that crew position. All other crew positions are specified in their respective paragraphs.

5.9.2. **Initial Candidates.** All initial instructor upgrade candidates must be mission ready in their unit's mission for a minimum of 6 months except those identified below:

*5.9.2.1. Instructor Pilot. Have a minimum flying time as follows:

TOTAL HOURS	PMAI HOURS*
Over 2,000	200
1,900-1,999	260
1,800-1,899	320
1,700-1,799	380
1,600-1,699	440
1,500-1,599	500

*Pilots must possess a minimum of 200 hours as an aircraft commander. For MC-130E/H/P, the 200 aircraft commander hours must be on an aircraft with a designated low-level mission. For AC-130H/U aircraft, the 200 aircraft commander hours must be on an AC-130. For EC-130E, the 200 aircraft commander hours may be on any C-130 MDS.

*5.9.2.2. Instructor Navigator**.** Have a minimum of 1,000 hours total time, 300 AC-130 hours, and at least 200 PMAI hours.

5.9.2.3. Instructor Electronic Warfare Officer**.** Have a minimum of 500 hours total time and at least 100 PMAI hours.

*5.9.2.4. Instructor Fire Control Officer**.** Have a minimum of 1000 hours total time, 300 AC-130 hours, and at least 200 PMAI hours.

*5.9.2.5. Instructor Flight Engineer**.** Have the following minimum flying time:

TOTAL HOURS	PMAI HOURS
Over 2,000	200
Less than 2,000	400

5.9.2.6. Instructor Communications Systems Operator**.** Have at least a 5-level primary AFSC, 500 hours total time, and at least 300 PMAI hours.

5.9.2.7. Instructor Sensor Operator/Aerial Gunner**.** Have a minimum of 400 hours total time.

5.9.2.8. Instructor Direct Support Operator (DSO)**.** Have at least 500 total hours total time as X1N3XX aircrew, and at least 50 hours as a DSO.

*5.9.2.9. Instructor Loadmaster**.** Have at least a 5-level loadmaster primary AFSC. Additionally, loadmasters will have a minimum of 1-year experience on AFSOC mission aircraft (EXCEPTION: 58 SOW will comply with all prerequisites except the 1 year experience on AFSOC mission aircraft).

5.9.2.10. ARC forces personnel required for in-unit qualification training as designated by the wing or group DO.

5.10. Ground and Flight Training Requirements. Crewmembers scheduled for instructor upgrade will complete AFCAT 36-2223 prerequisites prior to starting the upgrade. Comply with the following requirements:

5.10.1. Flight Instructor Preparatory (FIP). Aircrew members attending formal instructor upgrade training at Little Rock AFB will complete the ATS IPC course (PIP, NIP, FIP, LIP) prior to attending the course at Little Rock. Any aircrew members who attend instructor upgrade training at Kirtland AFB will complete FIP at Kirtland. Those aircrew members who do not attend formal training at either of the above formal schools, and were not previously aircrew instructors, will attend Academic Instructor Training Course (AITC) at Hurlburt Field.

5.10.2. ARC units do not require a waiver to conduct in-unit initial instructor upgrade training using formal school courseware. This courseware may be modified if local training conditions prevent the unit from following the lesson plans; i.e., no simulators.

5.10.3. Conduct flying training IAW applicable AFSOC Form 672 or 19 AF Form 14.

5.10.4. Conduct flight evaluation IAW AFSOCI 11-408.

5.11. Flight Examiner Upgrade. Flight examiners are selected from the most qualified and competent instructors. Before being designated as a flight examiner, candidates will demonstrate satisfactory knowledge of command training and evaluation procedures. In addition, they will demonstrate the ability to administer an evaluation IAW AFSOCI 11-408 and will satisfactorily complete an initial flight examiner evaluation.

5.11.1. Conduct flying training IAW applicable AFSOC Form 672 or 19 AF Form 14.

5.11.2. Conduct flight evaluation IAW AFSOCI 11-408.

Section D - Special Qualification Training

5.12. General. The commander will select those aircrew members qualified in the unit's mission to maintain additional special qualifications. Personnel previously special event qualified (to include pilots previously special event qualified as copilots) may requalify by demonstrating proficiency and accomplishing a flight evaluation, if applicable. Instructors are authorized to teach any special qualifications in which they are qualified and current unless specifically restricted. Conduct

evaluations and certification for special events IAW AFSOCI 11-408, applicable AFSOC Form 672 or 19 AF Form 14, and Table 5.1.

*5.12.1. **Inflight Refueling Contact (IFR) Qualification.** Conduct IAW the appropriate AFSOC Form 672 or 19 AF Form 14 followed by a special mission evaluation IAW AFSOCI 11-408. IFR contact pilots are trained and qualified in both seats. IFR pre-contact qualification is an instructor certified event. Units may select highly qualified pre-contact qualified pilots and copilots for upgrade to contact qualification. Upon completion of training and evaluation, these pilots will maintain currency IAW IFR aircraft commander criteria.

*5.12.2. **Helicopter Air Refueling (AR) Qualification.** Conduct IAW the appropriate AFSOC Form 672 followed by a special mission evaluation IAW AFSOCI 11-408.

*5.12.3. **GPS Integration**. A certified instructor navigator will conduct this training IAW T.O. 1C-130(H)H-1-4 and the "GPS Integration and SCNS OFP 41-03" AFSOC Form 672. Flight training is not required; academic and hands-on training (in a modified aircraft) takes approximately 4 hours. Make a "GPS Integration" entry in the AF 1381. Although not required, squadrons may track this training through AFORMS.

*5.12.4. **Threat Penetration Altitude (MC-130P)**. A certified instructor pilot will conduct this training IAW AFSOCI 11-202, Volume 9. Only mission qualified pilots will be certified to fly at these altitudes, copilots may occupy the copilots seat during this training. Make a "Threat Penetration Altitude" entry in the AF 1381.

5.13. Dual Qualified Sensor Operator Upgrade. The prerequisite flying time requirement is based on developing experience after initial qualification. Dual qualified sensor operator candidates should possess a demonstrated proficiency in their initial qualified position, knowledge, and judgment to effectively accomplish the unit's mission.

5.13.1. Prerequisites: Dual qualified sensor operator candidates will have a minimum of 300 hours AC-130 time.

5.13.2. Dual qualified sensor operator candidates are approved by the squadron director of operations. Squadron training (DOT) will forward requests for formal ground training to 16 OSS/DOT. 16 OSS/DOT will forward requests to HQ AFSOC/DOT and 19 SOS registrar. 19 SOS registrar will schedule ground training class dates and notify 16 OSS/DOT. 16 OSS/DOT will notify HQ AFSOC/DOT and squadron DOT in turn.

5.14. Ground and Flight Training Requirements:

5.14.1. The primary method of dual qualification upgrade ground training is satisfactory completion of the appropriate formal course. For approved in-unit upgrades, request courseware IAW paragraph 1.7.2.

5.14.2. The primary method of dual qualification upgrade flight training is satisfactory completion of approved in-unit training and the guidance below:

5.14.2.1. Flying training lessons will be conducted IAW AFSOCI 11-403 and HFI 36-2201, *Formal Aircrew Training Management*. Where conflicts exist between these instructions, comply with AFSOCI 11-403.

5.14.2.2. Flying training lessons should be completed sequentially. If mission scheduling or student progress dictates otherwise, the training sequence may be changed by the unit commander.

5.14.2.3. There should be minimum time lapse between training missions, and every effort should be made to complete mission qualification training requirements within 120 days.

5.14.2.4. Crewmember requirements may be conducted on training or operational missions under the supervision of an instructor. Comply with restrictions in AFSOCI 11-202.

5.14.2.5. Conduct flight evaluation IAW AFSOCI 11-408.

***5.15. Dual Target Attack Qualification.** FCO Dual Target Attack candidates will have a minimum of 250 hours of AC-130H/U time.

***Table 5.1. Special Mission Evaluations and Instructor Certified Events.**

SPECIAL MISSION EVALUATIONS	AC	EC	MC/P	MC/E	MC/H
Helicopter Air Refueling (P,FE)				**X**	
Inflight Refueling Contact (P,CP)	**X**	**X**	**X**	**X**	**X**
NVG Landing (P)			**X**	**X**	**X**
Night Low-Level (P, CP, N)	**X**				
NVG SCA (LN)			**X**		
INSTRUCTOR CERTIFIED EVENTS	**AC**	**EC**	**MC/P**	**MC/E**	**MC/H**
Basic Qual Instructor Pilot (P)				**X**	
Benson Tank Operations (FE, LM)				**X**	
BLU-82 (LM)				**X**	**X**
C-130E (P,CP,N,FE,LM)	**X**	**X**	**X**	**X**	
CDS (P,CP)			**X**		
Close Interval Operations (P, CP, N, FE) Note 1					**X**
Dual Target Attack (FCO) (Note 3)	**X**				
FARRP (P,FE,LM)				**X**	**X**
Formation Downwind Recovery (P)			**X**		
Formation Helicopter Refueling (P,CP,N)				**X**	
Formation Overhead Recovery (P)			**X**		
GPS Integration (N)			**X**		
Helicopter Loading (LM)				**X**	**X**
High Altitude Airdrop (N)			**X**	**X**	**X**
Infil/Exfil (FE,LM)			**X**		
Inflight Refueling Instructor (P)	**X**	**X**	**X**	**X**	**X**
Inflight Refueling Precontact (P,CP)	**X**	**X**	**X**	**X**	
Inflight Refueling (N,FE,) (Note 4)	**X**	**X**	**X**	**X**	
Helicopter Air Refueling (CP,N,LM)				**X**	
NVG Airland (FE)			**X**	**X**	
NVG Airland Instructor (P)			**X**	**X**	**X**
NVG HUD (P,CP)				**X**	
NVG Safety (FE)				**X**	
Night Low Level (FE, FCO)	**X**				

***Table 5.1. Continued.**

INSTRUCTOR CERTIFIED EVENTS	AC	EC	MC/P	MC/E	MC/H
NVG SCA (P,CP)			**X**	**X**	
Personnel Drop (LM)			**X**		
Psyop/Leaflet Drop (N,LM)			**X**		
SOFI (P,CP,LN,RN,FE,CSO,LM)			**X**		
Threat Penetration Altitude (P)			**X**		
Touch and Go Landings (P) Note 2	**X**	**X**	**X**	**X**	**X**

NOTES:

*1.Pilots will be designated as left or right seat certified

2. Aircraft Commanders must posses a minimum of 100 hours in command of C-130 type aircraft prior to certification.
3. AC-130U FCO only.
4. Basic IN's may instruct IFR.

Chapter 6

AIRCREW TRAINING RECORD

6.1. General. The AFSOC Form 670, *Aircrew Training Record*, contains the **AFSOC Forms 671**, *Training Comments Record*, and the applicable **AFSOC Form 672**, *Training Progress Record*, for the type training and aircrew position. Comply with the following instructions for management of the AFSOC Form 670. Formal schools training AFSOC aircrews will use their command's equivalent forms. Instructions for completing the 19 AF Form 15, the 19 AF Form 14, *Aircrew Training Progress Record*, and the 19 AF Form 13, *Aircrew Comments Training Record*, are contained in 58 SOWI 36-2201.

6.1.1. Initiate an AFSOC Form 670 for any aircrew member beginning:

6.1.1.1. An AFCAT 36-2223 formal school (either by primary or secondary method).

6.1.1.2. Theater/unit indoctrination.

6.1.1.3. Special mission event upgrade training.

6.1.1.4. Corrective action required as a result of a flight evaluation other than end-of-course evaluations. This requirement may be waived by the unit commander if corrective action is limited and would not warrant the initiation of a training folder. If initiated, the flight examiner who evaluated the aircrew member will enter comments pertinent to the training deficiency on the AFSOC Form 671.

6.1.2. Do not insert training forms in flight evaluation folders.

6.1.3. Maintain "active" AFSOC Forms 670 in a location readily accessible to instructors, trainers, supervisors, and the individual aircrew members in training. Training folders should be maintained in the squadron that students are assigned or attached to for flying.

6.1.4. Formal schools will, after the student's graduation, send the AETC or AFSOC Form 670 to the student's gaining unit.

6.1.5. Unit training managers will retain AFSOC Forms 670 from formal school training and in-unit upgrades for 1 year.

6.1.6. The instructor is responsible for documentation placed in the training folder for the aircrew member receiving training. The training folder must be available for the student to review.

6.2. Instructions for Documenting Aircrew Training (Form 670). Comply with the following instructions for documenting aircrew member training in the AFSOC Form 670, Aircrew Training Record.

6.2.1. **Student Information (Cover).** Provides student and course information.

6.2.1.1. Name/Grade. Self-explanatory.

6.2.1.2. Aircrew Position. Enter current aircrew position and level of qualification. For aircrew members in an upgrade program, enter aircrew position to which they are upgrading.

6.2.1.3. Unit of Assignment. Self-explanatory.

6.2.1.4. Type of Training. Enter formal course title or for special mission event qualification, enter type; i.e., Inflight Refueling, High Altitude Airdrop, NVG Landings, etc.

6.2.1.5. Course Number. Enter only AFCAT 36-2223 formal course number; i.e., C-130 ACQ, C-130 PIN, etc., otherwise leave blank.

6.2.1.6. Class Number. Enter formal school class number; otherwise, leave blank.

6.2.2. **Ground Training Summary (Inside Left).** This section provides a chronological record of ground training events. Record non-flying training events. Entries are required for special function trainer (SFT), celestial training device (CTD) training, part task trainer (PTT), cockpit procedures training (CPT), weapon system trainer (WST), mission rehearsal device (MRD), satellite navigation station (SNS) training, and ground training (GT). Entries are not required for in-unit academic instruction conducted IAW formal school courseware.

6.2.2.1. Date. Self-explanatory.

6.2.2.2. Training Period. Enter sequentially numbered training period designators; i.e., PTT-1, CPT-3, WST-2, GT-1, etc.

6.2.2.3. Instructor or Trainer (Qual). Enter name of the instructor or trainer and aircrew qualification; i.e., EN, AC, EF, etc.

6.2.2.4. Training Time. Self-explanatory. Do not include time normally associated with prebriefing and debriefing SFT, CTD, PTT, CPT, WST, MRD or SNS training missions.

6.2.3. **Written Evaluations.** Record data on written evaluations required by the training program.

6.2.3.1. Date. Enter date that written evaluation was completed.

6.2.3.2. Type. Enter AFSOCI 11-408 description or other appropriate identifier.

6.2.3.3. Grade. Make entry IAW AFSOCI 11-408.

6.2.4. **Flying Training Summary (Inside Right).** This section provides a chronological record of flying training events. Record flight training events, both on training sorties and operational missions. Log all events scheduled, even if canceled by external factors (WX, MX).

6.2.4.1. Date. Self-explanatory. On operational missions, enter inclusive dates.

6.2.4.2. Training Period. Enter sequentially numbered training period designators; i.e., P-1, T-1, T-2, etc.

6.2.4.3. Status. Use the following codes to indicate student status:

6.2.4.3.1. Satisfactory (S). The student met or exceeded all the listed required proficiency levels (RPL) for that training period. Student advances to the next programmed lesson or training period. When using AFSOC Form 672 without pre-printed RPLs for each training period, instructors will use judgment to determine overall student status.

6.2.4.3.2. Training Record (T). The student fell below the listed RPL for one or more job elements. The job element was not graded below standard last time it was graded and additional training periods that include that job element remain in that phase. The student advances to the next programmed lesson or training period. When using AFSOC Form 672 without pre-printed RPLs for each training period, instructors will use judgment to determine overall student status.

6.2.4.3.3. Unsatisfactory (U). The student fell below the listed RPL on the same job element for two consecutive training periods, or fell below the listed RPL on any job element and no training periods remain prior to an evaluation, or if dangerous tendencies are noted. When using AFSOC Form 672 without pre-printed RPLs for each training period, instructors will use judgment to determine overall student status. The student requires a progress review before scheduling any additional training.

6.2.4.3.4. Incomplete (I). The overall grade will be incomplete under one of the following conditions:

6.2.4.3.4.1. All required training period job elements were not graded, the student has not previously attained the RPL of the missed job elements, and the RPL changes to a higher level on the next training period or it is the last training period in a block or phase. The student will repeat the lesson or training period.

6.2.4.3.4.2. The student was graded “I” on the previous training period and the missed job element(s) could not be accomplished during the current training period. The student will repeat the lesson or training period.

NOTE: Enter "I" for incomplete missions followed by the reason. Use the following codes: "MX" for maintenance abort or delay, "OPS" for an operations abort or delay, "SYM" for sympathetic abort or delay, "WX" for weather abort or delay, or "IN" for student requirements being incompatible with the sortie being flown. All entries of "I" will be fully explained on the AFSOC Form 670.

6.2.4.3.5. Proficiency Advancement (P). Awarded in lieu of actual job element accomplishment when warranted by student's previous performance and knowledge. The student advances to the next programmed lesson or training period.

6.2.4.3.6. Exceptional (E). The student met or exceeded all RPLs and events in an exceptional manner.

6.2.4.3.7. Other (X). Flying performed without accomplishing job elements, for example, an AC-130HPMQ student who flies on a mission to support depot input/output on a trip to Robins AFB.

NOTE: Remedial training will be numbered the same as the deficient academic, simulator, or flying lesson followed by an "R" (Example: T4-R-1, T4-R-2, etc.). Remedial training flights resulting from Q2 or Q3 flight evaluations will also be numbered with an "R".

6.2.4.4. Instructor/Trainer (Qual). Enter name of the instructor or trainer and aircrew qualification.

6.2.4.5. Mission Time. Enter the total flight time of the training or operational mission in the top half of the block. If documentation of seat time is required, enter the time the student actually received instruction during the flight in the lower half of the block.

6.2.4.6. Cumulative Time. Use this block to enter the individual's total cumulative flight time in the specific training course. Enter total cumulative instruction time in the top half of the block. For courses requiring documentation of seat time, enter the total cumulative instruction time in the lower half of the block. The cumulative time block may start with total individual time when total time is a criteria to begin an upgrade.

6.2.5. **Performance Evaluation Summary.** Record data on required evaluations including reevaluations (if applicable).

6.2.5.1. Date Recommended. Enter date recommended for a performance evaluation (CPT, WST, flight).

6.2.5.2. Type Evaluation. Enter AFSOCI 11-408 evaluation description or other appropriate identifier.

6.2.5.3. Instructor/Trainer (Qual). Enter name of instructor or trainer and aircrew qualification.

6.2.5.4. Operations Review. Indicate, with the initials of the reviewer, that a records review has been accomplished by the operations officer following recommendation for an evaluation.

6.2.5.5. Date Eval. Enter date the evaluation was completed.

6.2.5.6. Flight Examiner. Self-explanatory.

6.2.5.7. Grade. Make entry IAW AFSOCI 11-408.

6.2.6. **Grading Standards/Definitions (Back Cover).** This section explains grading standards and training codes. Use the top section with the AFSOC Form 672.

6.2.7. **Training Period Designators.** Use the codes listed in the AFSOC Form 670 to describe training periods. Formal training schools may use more descriptive designators, if required.

6.2.8. **Remarks.** Indicate why an individual, enrolled in a training program, has not flown or has not been actively participating in the program (DNIF, TDY, etc.). Use sufficient detail to document the reasons and time frame. Make other remarks as appropriate.

6.3. Instructions for Documenting Aircrew Training Comments (AFSOC Form 671). AFSOC Form 671, Training Comments Record, provides for narrative descriptions of training events and the means for documenting operations review of training progress.

6.3.1. **Name.** Self-explanatory.

6.3.2. **Date.** Self-explanatory.

6.3.3. **Training Period.** Enter the appropriate training period designator, numbered sequentially.

*6.3.4. **Mission Profile/Comments/Recommendations.** Describe the mission scenario to accurately document each event; i.e., payload, type airdrops, type and number of approaches, etc. Local overprints are authorized. Comments should elaborate on student strengths and weaknesses, identify problem areas, record unusual circumstances, and indicate student progress. For formal school use, where preprinted RPLs are included, enter a comment whenever the student's performance level is below the printed RPL. Enter the authorization for progression on a proficiency basis. Recommendations should include tasks requiring further training and the type training required. The instructor will print and sign their name, rank, and crew qualification immediately following this entry.

6.3.5. **Operations Review.** The unit training officers or course managers will conduct a monthly review of active status AFSOC Forms 670. The operations officer will review active status AFSOC Forms 670 at least once each calendar quarter. The monthly review is not required during the month in which the quarterly review is accomplished. Document reviews on the AFSOC Form 671. The reviewer will insert "monthly review" or "quarterly review" as applicable in the Training Period block. Include comments concerning the student's progress, status, and recommendations in the Mission Profile/Strengths/Weaknesses/Recommendations block. Following applicable comments, the reviewer will print and sign their name and indicate their position; i.e., Operations Officer, Training Officer, etc.

6.3.6. **Student Review.** The student will initial on the last line of each training period's comments prior to the next training period, indicating awareness of training status. The student does not have to agree with the written comments before initialing form.

6.4. Instructions for Documenting Aircrew Performance (AFSOC Form 672). AFSOC Form 672, Aircrew Performance, provides for the overprint of task listings, scheduled training, and required end of course proficiency levels for each ground and flight training task. Use it also to record student proficiency levels on each training mission. Maintain AFSOC Forms 672 on the right side of the AFSOC Form 670.

6.4.1. **Name.** Self-explanatory.

6.4.2. **Crew Position.** Self-explanatory.

6.4.3. **Course/Phase.** Enter AFCAT 36-2223 formal course identification; i.e., C-130PIN. For special mission qualification, enter type; i.e., High Altitude Airdrop, NVG Landing, etc. Also identify training phase; i.e., ground, simulator, flying.

6.4.4. **Programmed Training Profile.** Provide the programmed training sequence to include SFT, CTD, PTT, CPT, WST, MRD, SNS, and flight training missions. Identify the type of training mission and number. For AFCAT 36-2223 courses, this section will reflect the Course Summary Document.

6.4.5. **Actual Training Profile.** Use this section to document the actual profile accomplished. Identify the training mission type and number (i.e., T-3).

6.4.6. **Task Listing.** Reflects the tasks and subtasks in the training program requiring specific student performance or knowledge proficiency standards. Use the left column to vertically identify a general area (i.e., ground operations, emergency procedures, etc.).

6.4.7. **Minimum Events Required.** Reflect the minimum number of times a student should satisfactorily complete a specific task.

6.4.8. **Performance Grade (P/Gr) and Knowledge Grade (K/Gr).** Enter a performance grade or knowledge grade, or both, by each task or subtask where performance and knowledge was demonstrated by the student. Use task performance and knowledge codes listed on the AFSOC Form 670. Non-instructor qualified trainers, i.e., aircraft commanders for copilots, will not enter performance or knowledge grades. Instead, they will use the "X" code described on the AFSOC Form 670. Formal schools and units may elect to use the last vertical column to document evaluation results. In these cases, enter the performance grade or knowledge grade or both by each task or subtask evaluated. Do not normally evaluate students until performance/knowledge levels are sustained at course standards.

NOTE: When the same AFSOC Form 672 is used to document more than one phase of training, end of phase required proficiency levels (end of simulator phase, etc.) for a task may be entered in the Performance Grade/Knowledge Grade blocks for that mission.

6.4.9. **Required Proficiency Levels (P/Gr and K/Gr).** These columns indicate the end of phase/course performance and knowledge proficiency standards required for each task and subtask. These will reflect the appropriate Master Task Listing standards.

6.5. AFSOC Form 672 Overprints. Maintain AFSOC Form 672 overprints on computer disk using the "FORM FLOW FILLER" program. HQ AFSOC/DOT is the OPR for the disk. Disks will be distributed to group training offices for copying and further distribution on an as required basis. Any unit desiring to update an AFSOC Form 672 will forward a copy of the revision through channels to HQ AFSOC/DOT for inclusion in the next issue of the disk.

STEPHEN R. CONNELLY , Col, USAF
Director, Operations

Distribution X: (Number of copies as indicated)
HQ USAF/XOOS/XOOT, Wash DC 20330-5054 (2)
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HQ AFMPC/DPMROM2, Randolph AFB TX 78150-4325 (1)

Attachment 1

CHEMICAL DEFENSE TASK QUALIFICATION TRAINING (CDTQT)

A1.1. General. This attachment contains the initial and recurring aircraft CDTQT requirements for AFSOC aircrews. The purpose of CDTQT is to reinforce the crewmember's awareness of limitations and demonstrate physiological effects while wearing the aircrew chemical defense ensemble (ACDE). The complications of heat exhaustion, fatigue, hyperventilation, limited dexterity, and hampered communication can all be experienced during CDTQT. All aircrew members must complete initial aircrew life support chemical defense training prior to accomplishing initial CDTQT. Complete initial disaster preparedness training for the ground ensemble prior to CDTQT if the ground ensemble is used.

A1.2. CDTQT Procedures:

A1.2.1. Accomplish CDTQT inflight using the primary unit aircraft. Crewmembers will perform primary crew duties while wearing the ACDE. All profiles must be a minimum of 1 hour and accomplished on training missions only.

A1.2.2. The entire ACDE need not be used. Normally, wear the filter pack, cotton gloves, butyl rubber gloves, Nomex gloves, and the protective hood, along with the CBO mask/AERPS and helmet (if applicable). Either the ACDE or ground ensemble may be worn during aircraft preflight. Ground ensembles will come from training assets.

A1.2.3. When wearing the CBO mask, do not accomplish CDTQT when required to wear NVGs. When wearing AERPS, NVG events may be accomplished.

A1.2.4. An observer is required to monitor each crewmember while accomplishing CDTQT. An instructor or flight examiner in each respective crew position, not wearing the chemical defense components, will act as the observer for initial CDTQT. During recurring CDTQT, if the crewmember can be directly observed by another primary crewmember, a dedicated observer is not required. The dedicated observer during recurring CDTQT may also wear AERPS for all crew positions except pilots (see A1.2.4.1)(two non-pilot crewmembers wearing AERPS may observe one another). Example: during an MC-130E flight with a full mission crew complement, all crewmembers, with the exception of one mission pilot occupying a pilot seat (see A1.2.4.1), may wear AERPS if all of these crewmembers have previously completed initial CDTQT. Dedicated observers not wearing AERPS for non-pilot crewmembers are not required in this case.

*A1.2.4.1. An instructor or flight examiner pilot not wearing the chemical defense components will occupy the opposite seat during initial pilot CDTQT. During recurring CDTQT, a mission qualified pilot not wearing the chemical defense components will act as the observer and occupy the opposite seat. With squadron commander approval, both pilots may wear AERPS while occupying the pilot seats provided both pilots have accomplished CDTQT within the past 90 days. The squadron commander may delegate this authority to the operations officer or mission commander.

A1.2.4.2. Observers will closely monitor crewmembers actions during CDTQT. If a crewmember experiences difficulties such as excessive thermal stress, headaches, hyperventilation, nausea, etc., the crewmember will remove the ensemble. The observer will notify the aircraft commander of any difficulties encountered.

A1.3. AC-130.

A1.3.1. Pilots will accomplish a minimum of one approach and landing. Pilots may accomplish CDTQT in either seat.

A1.3.2. Flight engineers will accomplish inflight duties including running any checklists accomplished from before starting engines through after landing.

A1.3.3. All other crewmembers will credit CDTQT while performing their normal crew duties inflight.

A1.4. MC-130P. Accomplish a profile that includes NVG low level and either an airland, airdrop, or helicopter air refueling event. In addition:

A1.4.1. Pilots will accomplish a minimum of one approach and landing. Pilots may accomplish CDTQT in either seat.

A1.4.2. Flight engineers will accomplish inflight duties including running any checklists accomplished from before starting engines through after landing.

A1.4.3. Loadmasters will accomplish preflight and inflight duties.

A1.4.4. All other crewmembers will credit CDTQT while performing their normal crew duties during the specified events.

A1.5. MC-130. Accomplish a profile that includes terrain following or NVG low level and either an airland, airdrop, or helicopter air refueling event. Do not credit simulated events. In addition:

A1.5.1. Pilots will accomplish a minimum of one approach and landing. Pilots may accomplish CDTQT in either seat.

A1.5.2. Flight engineers will accomplish inflight duties including running any checklists accomplished from before starting engines through after landing.

*A1.5.3. Loadmasters will accomplish preflight and inflight duties.
A1.5.4. All other crewmembers will credit CDTQT while performing their normal crew duties during the specified events.

***A1.6. EC-130.**

A1.6.1. Pilots will accomplish a minimum of one approach and landing. Pilots may accomplish CDTQT in either seat.

A1.6.2. Flight engineers will accomplish inflight duties including running any checklists accomplished from before starting engines through after landing.

A1.6.3. All other crewmembers will credit CDTQT while performing their normal crew duties inflight

Attachment 2

PILOT/FLIGHT ENGINEER SIMULATOR REFRESHER COURSE

A2.1. The annual simulator refresher course is designed to improve standardization and to provide maximum training on normal, instrument, and emergency procedures. The course is scheduled to be completed in 16 hours (12 hours for ARC). The course consists of consecutive 4-hour simulator missions with an in-depth systems prebriefing and debriefing for each mission. The prebriefing and simulator mission will thoroughly review the areas below. Modifications may be made to meet unit aircraft differences. Mission-oriented simulator training (MOST) will also be included. Students will not be evaluated by Flight Examiners during this training.

A2.2. The mission prebriefing will include normal operations, limitations, and malfunctions of the following aircraft systems as well as associated emergency procedures:

A2.2.1. Oxygen System

A2.2.2. Smoke, overheat, and fire detection and extinguishing systems.

A2.2.3. Fuel system:

A2.2.3.1. Helo air refueling system.

A2.2.3.2. Inflight refueling system (UARRSI).

A2.2.4. Environmental:

A2.2.4.1. Air conditioning system.

A2.2.4.2. Pressurization system.

*A2.2.4.3 Bleed Air

A2.2.5. Anti/deicing systems.

A2.2.6. Electrical system:

A2.2.6.1. AC power sources and buses.

A2.2.6.2. AC power distribution system.

A2.2.6.3. DC power distribution.

A2.2.6.4. Ground and emergency power.

A2.2.7. Engines:

A2.2.7.1. Engine oil system.

A2.2.7.2. Engine starting and ignition.

A2.2.8. Propellers.

A2.2.9. Instruments:

A2.2.9.1. Pitot-static systems.

A2.2.9.2. Compass system.

A2.2.10. Hydraulics:

A2.2.10.1. Hydraulic systems.

A2.2.10.2. Flight controls.

A2.2.10.3. Landing gear.

A2.2.10.4. Brake systems.

A2.2.10.5. Aft cargo door and ramp.

A2.2.10.6. Tanker air refueling systems.

A2.2.11. Communication/navigation systems.

A2.2.12. Integrated flight control system:

A2.2.12.1. Autopilot.

A2.2.12.2. Flight director system.

A2.2.13. Adverse weather operation, hot and cold weather operations, thunderstorm avoidance, and windshear.

A2.2.14. Current trends of accidents, incidents, and equipment malfunctions.

A2.3. Thoroughly review the following additional areas:

A2.3.1. Crash landing.

A2.3.2. Bailout.

A2.3.3. Ditching.

A2.3.4. Performance data.

A2.3.5. Driftdown.

A2.3.6. Buddy start.

A2.3.7. Windmill taxi start.

A2.3.8. Three-engine takeoff.

A2.3.9. Stalls and recoveries. Devote a minimum of 30 minutes of academic classroom training to a discussion of:

A2.3.9.1. Situations in which the aircraft is most susceptible to stall.

A2.3.9.2. Avoiding stalls when encountering those situations.

A2.3.9.3. Importance of crew coordination in preventing stalls.

A2.3.9.4. Stall recognition and recovery procedures.

A2.3.9.5. Relationship and effects of density altitude, airspeed, gross weight, bank angles, wing loading, and how they effect stalls.

A2.3.9.6. How to prevent secondary stalls.

A2.3.9.7. Fin stalls.

A2.3.10. Mission profile briefing (prior to each mission).

A2.4. Simulator missions will include the following areas:

A2.4.1. Pilot judgment and quick decision problems:

A2.4.1.1. Minimum of one quick decision problem for each simulator period.

A2.4.1.2. Instrument approaches and engine out procedures with emphasis on instrument approaches.

A2.4.1.3. Minimum of two rejects and one engine failure after refusal speed per crew on each simulator mission.

A2.4.2. Minimum of two planned tactical/low level missions where conditions can be altered or emergencies created that will test the crew's ability to think and plan during periods of stress. Emphasis should be placed on the appropriate conditions that Special Operations crews operate under, i.e. night, low level, air refueling, inflight refueling, and airdrop/airland.

A2.4.3. Minimum of one planned mission where runway length is critical, minimum altitude for terrain/obstacle clearance during climb, cruise, and descent is stressed, and examples of operating and experiencing emergencies at Emergency War Plan (EWP) weights is demonstrated.

A2.4.4. Emergencies and malfunctions will cover the following at least once during the length of the course. The items not covered in the simulator will be discussed during briefing and debriefing.

A2.4.4.1. APU and GTC fire.

A2.4.4.2. Starting malfunctions.

A2.4.4.3. Engine fire on ground.

A2.4.4.4. Wing isolation and bleed air divider valve failure.

A2.4.4.5. Aborted takeoff.

A2.4.4.6. Engine fire or failure takeoff.

A2.4.4.7. Runaway pitch trim.

A2.4.4.8. Engine overheat.

A2.4.4.9. Precautionary engine shutdown.

A2.4.4.10. Engine failure or fire inflight.

A2.4.4.11. Air start.

A2.4.4.12. Fuel jettison.

A2.4.4.13. Cargo jettison.

A2.4.4.14. Fuselage fire.

A2.4.4.15. Smoke and fume elimination.

A2.4.4.16. Electrical malfunctions and fire.

A2.4.4.16.1. Simultaneous four-engine power loss.

A2.4.4.16.2. Sequential four-engine power loss.

A2.4.4.17. Turbulence and thunderstorms.

A2.4.4.18. Engine, wing, and empennage icing.

A2.4.4.19. Air conditioning compartment overheat.

A2.4.4.20. Air conditioning anti-ice over temperature.

A2.4.4.21. Compass failure.

A2.4.4.22. Oil system failure.

A2.4.4.22.1. Low quantity.

A2.4.4.22.2. Low pressure.

A2.4.4.22.3. High temperature.

A2.4.4.23. Landing gear failure.

A2.4.4.24. Flight control failure.

A2.4.4.25. Asymmetric flaps.

A2.4.4.26. Inflight door warning.

A2.4.4.27. Rapid decompression.

A2.4.4.28. Emergency descent.

A2.4.4.29. Three-engine approach and go-around.

A2.4.4.30. Two-engine approach and go-around.

A2.4.4.31. No-flap approach.

A2.4.4.32. Wheels up landing.

A2.4.4.33. Prop malfunctions.

A2.4.4.34. Windmill taxi start.

A2.4.4.35. Three-engine takeoff.

A2.4.4.36. Confidence Maneuvers - (steep turns, slow flight, approach to stalls, and stall recoveries).

A2.4.4.36.1. As a minimum, each pilot will accomplish the following:

A2.4.4.36.1.1. Power on and power off stalls with gear up/down for 0%, 50%, and 100% flap configurations.

A2.4.4.36.1.2. Stall will be performed for both straight and level flight and with varying bank angles (30, 45).

A2.4.4.36.1.3. Fin stalls.

A2.4.4.36.2. While stall training should be practiced at all altitudes, emphasize training at traffic pattern altitudes and lower. During recovery, stress minimum loss of altitude and avoiding entry into a secondary stall.

A2.4.4.37. Unusual attitude, spatial disorientation, and partial panel training.

A2.4.4.38. Controllability check (battle damage).

A2.5. The mission debriefing will include a full debriefing and completion of a student critique.

Attachment 3

NAVIGATOR REFRESHER COURSE

A3.1. General The annual navigator refresher course is designed to improve standardization and to provide maximum training to improve and refine navigator job skills. The course will be designed to cover the following areas as a minimum and is scheduled to be completed in approximately 10 hours using available simulators/computer-based instruction. This training should be scheduled on 2 separate days. MOST may also be included when scheduling permits. Students will not be evaluated during Navigator Refresher Course or MOST.

A3.2. Premission Planning. Given a sample mission, prepare applicable charts and documents to fly the mission.

A3.3. Preflight Fuel Management. Given a completed flight plan and appropriate fuel planning documents, compute the preflight fuel management section of the AFSOC Form 37, Flight Plan and Record. For IFR qualified navigators, a multiple leg fuel plan is required.

A3.4. In-flight Fuel Management. Given appropriate fuel planning documents and forms, compute fuel entries IAW AFSOCI 11-202, Volume 2.

A3.5. Calibration Checks. Given a compass, true airspeed meter, true heading, indicated airspeed, and outside air temperature gauge, compute calibration checks for each instrument (as required).

A3.6. Celestial (EC/MC-130P units only). Given appropriate celestial data, compute the Zn and Hc of the sun and moon or stars. Resolve sextant altitudes to an intercept.

A3.7. Navigation Equipment. Given appropriate navigation equipment and selected LOPs, cross-check and integrate all applicable navigation equipment to arrive at the most accurate position.

A3.8. Pacing. Given a simulator mission or classroom situation, perform/discuss inflight navigation duties with emphasis on staying ahead of the aircraft.

A3.9. Instrument Approach and Departure Procedures. Using DoD flight information publications for approach and departure, discuss the proper procedures for monitoring aircraft during approach and departure operations. Discuss flight publications that can be used in lieu of DoD FLIP products.

A3.10. **Publications Review.** Review contents of the Foreign Clearance Guide (Unclassified and Classified portions), FLIP Documents, Flight Information Handbook, and the National Imagery and Mapping Agency (NIMA) Chart Products Catalog. Review procedures for Due Regard.

A3.11. HARP Review. For those navigators maintaining HARP qualification, review procedures then compute and plot a HARP.

A3.12. Navigation Systems Review. Review each component and interface of the applicable aircraft's navigation system.

A3.13. Mapping and Geodesy. Conduct a review of mapping theory to include datum conversion and GPS capabilities/limitations.

A3.14. Execution Checklists, Air Tasking Orders, Special Instructions, and Communications Instructions/Matrix. Conduct a review of the format, and content, emphasizing verification of data to insure mission information is complete, accurate, and deconflicted.

A3.15. Psychological Operations and Procedures. Conduct a review of psychological operations and procedures associated with Leaflet airdrop operations.

Attachment 4

ELECTRONIC WARFARE OFFICERS REFRESHER COURSE

A4.1. General The annual electronic warfare officer (EWO) refresher course is designed to improve standardization, provide a review of equipment capabilities and procedures, provide a review and update on threat systems, and provide training in threat identification. The course is normally scheduled to be completed in 24 academic hours and will not include a written examination. Units will develop courseware in coordination with group intelligence and may add or delete items as applicable to their assigned aircraft and mission. MOST may also be included when scheduling permits. Students will not be evaluated during EWO Refresher Course or MOST.

A4.2. Publications. Using an instructor led discussion, review the following publications:

A4.2.1. MCM 3-1.

A4.2.2. AFSOCI 11-202.

A4.2.3. AFSOCMAN 11-1 Volume 2 and applicable volumes.

A4.2.4. Conduct a review of the applicable intelligence publications.

A4.3. Electronic Combat Principles. Using an instructor led discussion, review the following EC principles:

A4.3.1. Radar cross-section (RCS), resolution cell, radar horizon, and maximum theoretical range.

A4.3.2. Examine the use of the radar shadow length computer and equations used for terrain masking.

A4.3.3. Discuss the various types of scan techniques employed by radar, i.e. track-while-scan, conical, and monopulse.

A4.3.4. Discuss moving target indicator and pulse doppler.

A4.3.5. Discuss the types of electronic countermeasures employed by the ECM systems onboard your unit assigned aircraft.

A4.3.6. Discuss electronic counter-countermeasures which might be used to defeat the ECM systems onboard your unit aircraft.

A4.4. Infrared Countermeasures (IRCM) and Chaff. Using an instructor led discussion, review the employment of chaff and IRCM.

A4.4.1. Explain how chaff is effective versus threat radars, i.e., RCS, bloom time, frequency, and radar resolution cell.

A4.4.2. Explain how flares are effective versus IR guided threats i.e., micron range, and rise time.

A4.4.3. Explain the techniques employed by IRCM pods to defeat infrared (IR) guided threats.

A4.5. Threats. Using an instructor led discussion, review the following threat systems:

A4.5.1. Review the capabilities and limitations of the ground and sea based SAM systems in the unit's area of responsibility (AOR).

A4.5.2. Review the air-to-air threat systems in the unit's AOR.

A4.5.3. Review the ground and sea based AAA systems in the unit's AOR.

A4.6. IRCM and Expendables Equipment. Using an instructor led discussion, review the capabilities and limitations of special operations aircraft IRCM and expendables gear.

A4.6.1. MC-130E/H:

A4.6.1.1. AN/AAR-44.

A4.6.1.2. AN/ALE-40.

A4.6.1.3. QRC-84-02A.

A4.6.2. AC-130H/U:

A4.6.2.1. AN/AAR-44 (H, U).

A4.6.2.2. AN/ALE-40.

A4.6.2.3. QRC-84-02A.

A4.6.3. MC-130P:

A4.6.3.1. AN/ALE-40.

A4.6.3.2. AN/AAR-44.

A4.7. Tactics. Using an instructor led discussion, review tactics versus different threat types. Considerations should include but not be limited to: day/night conditions, multiple weapons types per threat, i.e. guns, IR missiles, radar missiles. Conduct threat analysis for airborne threats, surface to air missiles and anti-aircraft artillery.

A4.8. Receiving Equipment. Using an instructor led discussion, review the capabilities and limitations of special operations aircraft receiving equipment:

A4.8.1. AN/ALR-69 (MC-130E/H/P, AC-130H).

A4.8.2. QRC-84-05 (MC-130E, AC-130H).

A4.8.3. AN/APR-46 (AC-130H/U, MC-130E/H).

A4.8.4. AN/ALR-56 (AC-130U).

A4.9. Electronic Countermeasures (ECM) Equipment. Using an instructor led discussion, review the capabilities and limitations of special operations aircraft ECM gear:

A4.9.1. MC-130E/H:

A4.9.1.1. AN/ALQ-172.

A4.9.1.2. AN/ALQ-196

A4.9.2. AC-130H/U:

A4.9.2.1. AN/ALQ-172 (U).

A4.9.2.2. AN/ALQ-131 (H).

A4.9.2.3. Secure Communications.

A4.10. Mission Planning. Using an enemy order of battle, rules of engagement, target objectives, intelligence, support, and flight/mission planning materials and equipment, successfully plan a mission. Note: This requirement can be fulfilled by completion of a SOPE when under the direction of an instructor.

A4.10.1. Using a mission planning computer:

A4.10.1.1. Construct a target area chart.

A4.10.1.2. Construct a route chart.

A4.10.1.3. Construct a flight plan.

A4.10.1.4. Build and load a data transfer module.

A4.10.2. Use all available intelligence sources.

A4.10.3. Prepare a briefing using mission planning computer information.

A4.10.4. Compile all mission planning data for future study.

A4.10.5. The instructor will designate a portion of the route to be manually mission planned, to include shadow graphing.

A4.11. Electronic Sensor Systems (AC-130H Only). Review the use and employment of the AN/APQ-150 and the AN/ASD-5.

A4.11.1. Review the families of beacons that are compatible with each respective sensor.

A4.11.2. Review target search and track procedures.

Attachment 5

FLIGHT ENGINEER SYSTEMS REFRESHER COURSE

A5.1. The annual system refresher course is designed to improve standardization and to provide maximum training on normal procedures, emergency procedures, and hostile environment repair. The course is scheduled to be completed in 5 days. It consists of in-depth systems coverage and emergency procedures for each system. Modifications may be made to meet unit aircraft differences.

A5.2. The system refresher will include the following areas:

A5.2.1. The crewmember will review normal operations, limitations, and malfunctions of the following aircraft systems as well as associated emergency procedures:

A5.2.1.1. Warning systems.

A5.2.1.2. Oxygen systems.

A5.2.1.3. Smoke, overheat, and fire detection and extinguishing systems.

A5.2.1.4. Fuel system, Air-refueling.

A5.2.1.5. Environmental:

A5.2.1.5.1. Air conditioning system.

A5.2.1.5.2. Pressurization system.

*A5.2.1.5.3 Bleed Air

A5.2.1.6. Anti/deicing systems.

A5.2.1.7. Electrical system:

A5.2.1.7.1. AC power sources and buses.

A5.2.1.7.2. AC power distribution system.

A5.2.1.7.3. DC power distribution.

A5.2.1.7.4. Ground and emergency power.

A5.2.1.8. Engines:

A5.2.1.8.1. Engine oil system.

A5.2.1.8.2. Engine starting and ignition.

A5.2.1.8.3. APU/GTC.

A5.2.1.9. Propellers control systems.

A5.2.1.10. Instruments:

A5.2.1.10.1. Pitot-static systems.

A5.2.1.10.2. Radar cooling.

A5.2.1.10.3. Radar limitation

A5.2.1.10.4. Radar pressurization.

A5.2.1.11 Hydraulics:

A5.2.1.11.1. Hydraulic systems.

A5.2.1.11.2. Flight controls.

A5.2.1.11.3. Landing gear.

A5.2.1.11.4. Brake systems.

A5.2.1.11.5. Aft cargo door and ramp.

A5.2.1.12. Communication/ICS.

A5.2.1.13. Integrated flight control system to include the flight director system.

A5.2.1.14. Current trends of accidents, incidents, and equipment malfunctions.

A5.2.1.15. Combat repair.

A5.2.2. Thoroughly review the following additional areas:

A5.2.2.1. Crash landing.

A5.2.2.2. Bailout.

A5.2.2.3. Ditching.

A5.2.2.4. Performance data.

A5.2.2.5. Driftdown.

A5.3. Emergencies and malfunctions will cover the following at least once during the length of the course.

A5.3.1. APU and GTC fire.

A5.3.2. Starting malfunctions.

A5.3.3. Engine fire on ground.

A5.3.4. Wing isolation and bleed air divider valve failure.

A5.3.5. Engine fire or failure takeoff.

A5.3.6. Engine overheat.

A5.3.7. Fuel jettison.

A5.3.8. Cargo jettison.

A5.3.9. Fuselage fire.

A5.3.10. Smoke and fume elimination.

A5.3.11. Electrical malfunctions and fire.

A5.3.12. Engine, wing, and empennage icing.

A5.3.13. Air conditioning compartment overheat.

A5.3.14. Air conditioning anti-ice over temperature.

A5.3.15. Oil system failure.

A5.3.15.1. Low quantity.

A5.3.15.2. Low pressure.

A5.3.15.3. High temperature.

A5.3.16. Landing gear failure.

A5.3.17. Flight control failure.

A5.3.18. Asymmetric flaps.

A5.3.19. Inflight door warning.

A5.3.20. Rapid decompression.

A5.3.21. Wheels up landing.

A5.3.22. Prop malfunctions.

A5.3.23. Component location and identification.

Attachment 6

COMMUNICATION SYSTEMS OPERATOR REFRESHER COURSE

A6.1. The annual communication systems operator refresher course is designed to improve standardization and to refine communication systems operator's job skills. An evaluation is not required.

A6.2. The course will be designed to cover the following areas using simulator/computer based instruction and academics:

A6.2.1. Self Contained Navigation System (SCNS)(MC-130P only).

A6.2.2. Flight Information Publications (FLIP).

A6.2.3. ADIZ Procedures.

A6.2.4. Flights over International Airspace under "Due Regard".

A6.2.5. Global HF Network.

A6.2.6. Code and Authentication Documents.

A6.2.7. Emergency Procedures and Messages.

A6.2.8. Aircraft Electrical System.

A6.2.9. Intercept Procedures.

A6.2.10. ARC-190 Liaison Radio.

A6.2.11. ARC-513 VHF/FM Radio.

A6.2.12. ARD 25/50 DF System (MC-130P only).

A6.2.13. DFA-730 Radio Compass (MC-130P only).

A6.2.14. ARC-164 UHF Radio/Have Quick.

A6.2.15. ARC-186 VHF/AM/FM Radio.

A6.2.16. KYK-13, KOI-18 Loading Procedures.

A6.2.17. KY-58 Secure Voice System.

A6.2.18. KY-75 Secure Voice System.

A6.2.19. IFF.

A6.2.20. Data Burst.

A6.2.21. Defensive Systems.

Attachment 7

LOADMASTER REFRESHER COURSE

A7.1. General. The annual loadmaster refresher course is designed to improve standardization and provide maximum training on loadmaster duties and responsibilities. The course is normally scheduled to be completed in 30 hours. Units will use formal school courseware when available and may add or delete items as applicable to their assigned aircraft and mission. Schedule an aircraft or PTT for applicable portions of this course.

A7.2. Publications:

A7.2.1. Explain the use of publications required by loadmasters to perform their duties:

A7.2.1.1. Technical orders.

A7.2.1.2. AF publications.

A7.2.1.3. Command publications.

A7.2.1.4. FCIF and FCIS.

A7.2.2. State directives to be carried:

A7.2.2.1. Aircraft commanders mission kit (applicable portions).

A7.2.2.2. Loadmaster kit.

A7.2.3. Review loadmaster duties as outlined in applicable volume of AFSOCI 11-202 and AFJMAN 24-204, *Preparing Hazardous Materials for Military Air Shipments*.

A7.2.3.1. Border clearance requirements.

A7.2.3.2. Local directives.

A7.3. Aircraft Systems and Operations. Explain correct procedures, operational checks, and normal usage IAW T.O. 1C-130X-1, T.O. 1C-130(A)H-1, T.O. 1C-130A-9, , T.O. 1C-130(M)E-1, MCM 3-1, and AFSOCMAN 11-1.

A7.3.1. Public address system.

A7.3.2. Interphone/ICS system.

A7.3.3. Hydraulic systems.

A7.3.4. Oxygen Systems.

A7.3.5. Benson tanks.

A7.3.6. Lighting systems.

A7.3.7. Air Conditioning system (AC-130 only).

A7.3.8. Munitions handling and hot cargo procedures(AC-130 only).

A7.3.9. Defensive system (AN/ALE 40).

A7.3.10. Gunfire simulator light (AC-130H only).

A7.3.11. Nitrogen cart and sentry dawg loading and unloading (AC-130 only).

A7.4. Cargo Loading Systems and Aids:

A7.4.1. Explain correct procedures, operation checks, and normal usage IAW T.O. 1C-130A-9 for cargo winching.

A7.4.1.1. Winch installation.

A7.4.1.2. Checklist procedures.

A7.4.1.3. Accessory kits.

A7.4.1.4. Internal winching configuration.

A7.4.1.5. External winching configuration.

A7.4.1.6. Self-winching configuration.

A7.4.2. Explain correct procedures, operational checks, and limitations of the 463L dual rail system IAW T.O. 1C-130A-9 and T.O. 1C-130(M)E-1 (if applicable).

A7.4.2.1. Left and right side locks.

A7.4.2.2. Pallet weight limitation.

A7.4.2.3. Rail limitations with missing core bolts.

A7.5. Structural Limitations:

A7.5.1. Using the floor loading capacity chart in T.O. 1C-130A-9, determine the following:

A7.5.1.1. Contact area pressures (PSI).

A7.5.1.2. Contact area pressures (PSF).

A7.5.1.3. Linear foot limitations (PLF).

A7.5.1.4. Axle and wheel weight limits.

A7.5.1.5. Compartment load limits.

A7.5.2. Compute the area and PSI for specific items of cargo with and without shoring:

A7.5.2.1. Skid mounted cargo.

A7.5.2.2. Drums.

A7.5.2.3. Pneumatic tires.

A7.5.2.4. Solid rubber tires and steel wheels.

A7.6. Weight and balance:

A7.6.1. Determine formulas used for weight and balance and solve problems by using formulas to compute the center of gravity of an aircraft:

A7.6.1.1. Basic weight and balance formula.

A7.6.1.2. Center of gravity and load/shift formula.

A7.6.2. Select and use charts and graphs required to complete DD Form 365-4, Aircraft Weight and Balance Clearance Form F- Transport:

A7.6.2.1. T.O. 1C-130X-1, weight limitations charts.

A7.6.2.2. T.O. 1C-130X-5, loading charts.

A7.6.2.3. T.O. 1C-130(A)H-5 ammo charts.

A7.6.2.4. AFSOCR 55-19, appropriate volumes, and AFSOCI 11-202 appropriate volumes.

A7.7. Airlift of Hazardous, Perishable, Classified Materials, and Cargo Requiring Special Handling.

A7.7.1. Using AFMAN 24-204, state restrictions and precautions for handling, loading, and airlifting of hazardous materials.

A7.7.1.1. Restrictions from compatibility chart.

A7.7.1.2. Procedures for utilizing AF Form 127, Traffic Transfer Receipt.

A7.7.1.3. Safety precautions and DD Form 1387-2, Special Handling Data/Certification.

A7.7.1.4. Procedures for utilizing DD Form 2133 Joint Airlift Inspection Record.

A7.7.1.5. Protective clothing and equipment.

A7.7.2. IAW AFJMAN 24-204, state procedures for airlifting the following:

A7.7.2.1. Mail.

A7.7.2.2. Biological material.

A7.7.2.3. Classified material.

A7.8. Load Planning:

A7.8.1. Review the basic principles of load planning and demonstrate the use of projection charts in T.O. 1C-130A-9.

A7.8.2. Load plan given mixed loads to include the following:

A7.8.2.1. Palletized cargo.

A7.8.2.2. Distributed cargo.

A7.8.2.3. Concentrated cargo.

A7.8.2.4. Hazardous cargo.

A7.8.2.5. Vehicles.

A7.8.2.6. Troops.

A7.8.3. Using load plan and chart E, compute DD Form 365-4.

A7.9. Applied Load Restraint: State Restraint Criteria and Tie-down Capacities. Using a tape measure, compute required restraint on selected items.

A7.9.1. Directional restraint requirements.

A7.9.2. Tie-down devices, straps.

A7.9.3. Use of chain bridle and chain gate.

A7.9.4. Use of barriers for spear type items.

A7.9.5. Using a tape measure, compute required restraint.

A7.9.6. Winch load an item of rolling stock into the aircraft.

A7.10. Fleet service. Review the joint responsibilities of fleet service and the loadmaster IAW AFJMAN 24-204, and applicable volume of AFSOCR 55-19 and AFSOCI 11-202.

A7.10.1. Aircraft cleanliness.

A7.10.2. Supplies and equipment.

A7.10.3. Meals.

A7.10.4. Forms.

A7.11. Passenger handling techniques:

A7.11.1. Review the responsibilities and duties of the loadmaster for troop and medical evacuation flights.

A7.11.1.1. Seatings.

A7.11.1.2. Briefings.

A7.11.1.3. Meals and comfort items.

A7.11.1.4. Emergency procedures and equipment.

A7.11.1.5. In-flight duties.

A7.11.2. Passenger relations.

A7.12. Emergency procedures:

A7.12.1. Review emergency procedures outlined in T.O. 1C-130X-1 that pertains to the loadmaster:

A7.12.1.1. Ground operations.

A7.12.1.2. Inflight.

A7.12.1.3. Landing.

A7.12.2. Review jettison procedures in T.O. 1C-130X-1 and T.O. 1C-130A-9, and ammo jettison procedures in AFSOCI 11-202.

A7.13. Tactics. Review equipment and procedures used in combat situations.

A7.13.1. Scanner duties.

A7.13.2. Threat recognition and avoidance tactics.

A7.13.3. Defensive tactics.

A7.14. Infiltration and Exfiltration: (MC-130)

A7.14.1. Vehicles.

A7.14.2. Helicopters.

A7.14.3. Troops.

A7.14.4. Cargo compartment preparation.

A7.14.5. Canary slides.

A7.15. Aerial Delivery Equipment. Review the function and limitation of airdrop components.

A7.15.1. Platforms.

A7.15.2. Containers.

A7.15.3. Release assemblies.

A7.15.4. Parachutes.

A7.15.5. Aerial delivery hardware and expendables.

A7.15.6. Extraction system components.

A7.15.7. Pyrotechnics and MA-1/2 kits.

A7.16. Container delivery system (CDS). Review equipment, configurations, and procedures for CDS airdrops including heavy CDS procedures.

A7.16.1. CDS kit.

A7.16.2. Center vertical restraint (CVR).

A7.16.3. Buffer stop assembly.

A7.16.4. Release gate locations.

A7.16.5. Joint airdrop inspection (JAI).

A7.16.6. In-flight checklist procedures.

A7.16.7. Malfunction procedures.

A7.17. High Speed Low Level Aerial Delivery System (HSLLADS)/Container Release System (CRS). Review equipment, configuration, and procedures for HSLLADS/CRS airdrops.

A7.17.1. Single container drop.

A7.17.2. Multiple container drop.

A7.17.3. Release system.

A7.17.4. Joint airdrop inspection.

A7.17.5. Inflight checklist procedures.

A7.17.6. Malfunction Procedures.

A7.18. Heavy Equipment. Review equipment, configurations, and procedures used for heavy equipment drops.

A7.18.1. Single extraction.

A7.18.2. Sequential extraction.

A7.18.3. Combination drops.

A7.18.4. A/A37-A-11 tow plate system.

A7.18.5. Dual rail lock settings.

A7.18.6. JAI.

A7.18.7. Inflight checklist procedures.

A7.18.8. Malfunction procedures.

A7.19. Paratroop or Door Bundle Drop. Review equipment, configurations, and procedures used in actual/simulated paratroop drops.

A7.19.1. Anchor cables.

A7.19.2. Static line retrievers.

A7.19.3. Y-cables for troop doors.

A7.19.4. Jump platforms.

A7.19.5. Door Bundles.

A7.19.6. Configurations IAW T.O. 1C-130A-9.

A7.19.7. Towed Paratrooper Retrieval System (as required).

A7.19.8. Loadmaster and jumpmaster inspection checklist.

A7.19.9. In-flight procedures.

A7.19.10. Paratroop emergency procedures.

A7.20. Combat Rubber Raiding Craft (CRRC). Review equipment, configuration, and procedures for CRRC airdrops.

A7.20.1. Release systems/single or multiple airdrop.

A7.20.2. Limitations.

A7.20.3. JAI.

A7.20.4. Combination airdrop procedures.

A7.20.5. Inflight checklist procedures.

A7.20.6. Malfunction procedures.

A7.21. Container Ramp Loads. Review equipment, configuration, and procedures for bundles airdropped from the aircraft cargo ramp.

A7.21.1. Release method.

A7.21.2. Ramp roller configuration.

A7.21.3. Combination airdrop procedures.

A7.21.4. Load inspection.

A7.21.5. Inflight checklist.

A7.21.6. Malfunction Procedures.

A7.22. Method A and B Combat Offload:

A7.22.1. Platforms.

A7.22.2. Containers.

A7.23. BLU-82. Review equipment, configurations, and procedures used for BLU-82 airdrop.

A7.23.1. Single extraction.

A7.23.2. Dual rail lock setting.

A7.23.3. A/A37-A-11 tow plate system.

A7.23.4. Drop/Arming sequence.

A7.23.5. JAI.

A7.23.6. Inflight checklist procedures.

A7.23.7. Malfunction procedures.

A7.24. Review the responsibilities and duties of the loadmaster for inflight refueling IAW T.O. 1-1C-1-29, AFSOCI 11-202, LTM 1MC-130E-1, 1C-130(H)H-1 and 1C-130(M)H-1 as appropriate.

A7.24.1. Safety precaution/restriction.

A7.24.2. Aircraft weight and balance.

A7.24.3. Inflight checklist

A7.24.4. Pax/troop briefings.

A7.24.5. Emergency procedures.

A7.25. Helicopter Air Refueling. Review the responsibilities and duties of the loadmaster for air refueling IAW T.O. 1-1C-1-20, AFSOCI 11-202, T.O. 1C-130(M)E-1, T.O. 1C-130(H)H-1 and T.O. 1C-130(M)H-1 as appropriate.

A7.25.1. Safety precaution/restriction.

A7.25.2. Aircraft weight and balance.

A7.25.3. Interphone/radio procedures.

A7.25.4. Communications-out procedures.

A7.25.5. Systems operations.

A7.25.6. Inflight checklist.

A7.25.7. Terminology/calls.

A7.25.8. Emergency procedures.

A7.26. FARRP. Review the responsibilities and duties of the loadmaster for FARRP IAW AFSOCI 11-202, AFSOCR 55-12, T.O. 1C-130(M)E-1, T.O. 1C-130(M)H-1, and T.O. 00-25-172.(CBI courseware may be used for this block)

A7.26.1. Safety precaution/restriction.

A7.26.2. Interphone/Radio procedures.

A7.26.3. System operations.

A7.26.4. Checklist procedures.

A7.26.5. Assembly/reassemble area.

A7.26.6. Terminology/calls.

A7.26.7. Emergency procedures.

A7.27. JAI requirement and procedures IAW AFJI 13-210 and applicable T.O.

A7.27.1. Responsibility.

A7.27.2. Required forms and completion procedures/documentation.

A7.27.3. Critical inspection areas/procedures.

A7.27.4. Disposition procedures.

A7.27.5. Unilateral airdrop training JAI responsibilities.

A7.27.6. JAAT/SAAM/Contingency/exercise/emergency airdrop JAI responsibilities.

***A7.28. Psychological Operations and Procedures.** Conduct a review of psychological operations and procedures associated with Leaflet airdrop operations.

Attachment 8

SAMPLE UPGRADE NOMINATION LETTER

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE SPECIAL OPERATIONS COMMAND (AFSOC)

MEMORANDUM FOR 16 OSS/DOT
16 OG/CC
HQ AFSOC/DOT
IN TURN

FROM: 81 SOS/DOT

SUBJECT: Nomination for Navigator Instructor Qualification

1. The 81 SOS nominates Lt Ace DeMarco for NIQ class 99001. His personal information is as follows:

SSAN:
Billeting:
Security Clearance:
Mode of Travel:
Mailing Address: (unit)

2. Any questions may be directed to (unit training officer) at DSN XXX-XXXX.

Squadron DO or CC signature block

Forward this memo from the unit training office to the group training office (or equivalent) and group commander for coordination. Group training will forward a hard copy of the memo to HQ AFSOC/DOT (Fax number is DSN 579-2232).